H. R. 2478

To establish a balanced energy program for the United States that unlocks the potential of renewable energy and energy efficiency, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

July 11, 2001

Ms. Woolsey (for herself, Mr. Filner, Mr. Sanders, Ms. McKinney, Mr. Hoeffel, Mr Thompson of Mississippi, Mr. Payne, Mr. Baird, Mr. Baca, Mr. Baldacci, Ms. Rivers, Mr. Blumenauer, Mr. Lantos, Mrs. Mink of Hawaii, Mr. Wu, Mr. Honda, and Mr. Udall of Colorado) introduced the following bill; which was referred to the Committee on Ways and Means, and in addition to the Committees on Science, and Energy and Commerce, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To establish a balanced energy program for the United States that unlocks the potential of renewable energy and energy efficiency, and for other purposes.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 SECTION 1. SHORT TITLE; TABLE OF CONTENTS.
- 4 (a) Short Title.—This Act may be cited as the
- 5 "Comprehensive Renewable Energy and Energy Efficiency
- 6 Act of 2001".

1 (b) Table of Contents.—

- Sec. 1. Short title; table of contents.
- Sec. 2. Findings.
- Sec. 3. National research and development policy.
- Sec. 4. Definitions.

TITLE I—RESEARCH, DEVELOPMENT, AND DEMONSTRATION

- Sec. 101. Enhanced renewable energy research, development, and demonstration
- Sec. 102. Enhanced energy efficiency research, development, and demonstration.
- Sec. 103. Biomass energy and related chemical research, development, and demonstration.
- Sec. 104. Assessment of renewable energy resources.
- Sec. 105. Enhanced aeronautical system energy efficiency research, development, and demonstration.
- Sec. 106. Progress report.
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- Sec. 201. Study of financing for prototype technologies.
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TITLE III—REGULATORY PROVISIONS

- Sec. 301. Public Benefits Trust Fund.
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- Sec. 401. Energy savings measures in Capitol.
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TITLE V—TAX PROVISIONS

Sec. 500. Amendment of 1986 Code.

Subtitle A—Energy-Efficient Property Used in Business

- Sec. 501. Credit for certain energy-efficient property used in business.
- Sec. 502. Energy-efficient commercial building property deduction.
- Sec. 503. Business tax credit for the manufacture of energy efficient appliances.

Subtitle B—Residential Energy Systems

- Sec. 511. Credit for construction of new energy-efficient home.
- Sec. 512. Credit for energy efficiency improvements to existing homes.
- Sec. 513. Credit for residential solar, wind, and fuel cell energy property.
- Sec. 514. Credit for purchase of energy star products.

Subtitle C—Electricity Facilities and Production

- Sec. 521. Incentive for distributed generation.
- Sec. 522. Modifications to credit for electricity produced from renewable and waste products.
- Sec. 523. Treatment of facilities using bagasse to produce energy as solid waste disposal facilities eligible for tax-exempt financing.
- Sec. 524. Depreciation of property used in the transmission of electricity.
- Sec. 525. Credit for investment in additional plant capacity for existing renewable resources facilities producing electricity.

Subtitle D—Hybrid Electric Vehicles

- Sec. 531. Alternative motor vehicle credit.
- Sec. 532. Modification of credit for qualified electric vehicles.
- Sec. 533. Credit for retail sale of alternative fuels as motor vehicle fuel.
- Sec. 534. Extension of deduction for certain refueling property.
- Sec. 535. Credit for installation of alternative fueling stations.

l SEC. 2. FINDINGS.

- 2 The Congress finds that—
- 3 (1) there is a need for a robust renewable en-
- 4 ergy and energy efficiency research and development
- 5 program that provides a basis for the development,
- 6 demonstration, and deployment of new energy tech-
- 7 nologies in partnership with industry;
- 8 (2) Federal budget authority for renewable en-
- 9 ergy and energy efficiency research and development
- has declined significantly since 1980; and
- 11 (3) the President's budget request for fiscal
- year 2002 makes even greater reductions in these

1	programs, imperiling promising technologies that
2	have the potential to reduce energy consumption and
3	increase energy efficiency.
4	SEC. 3. NATIONAL RESEARCH AND DEVELOPMENT POLICY.
5	It shall be the policy of the United States that its
6	research, development, demonstration, and commercial ap-
7	plications programs be designed to enable 20 percent of
8	the energy generated in the United States from stationary
9	sources to be generated from nonhydropower renewable
10	energy sources by the year 2020.
11	SEC. 4. DEFINITIONS.
12	For purposes of this Act, except as otherwise
13	provided—
14	(1) the term "biomass" means any organic
15	matter that is available on a renewable or recurring
16	basis, including agricultural crops and trees, wood
17	and wood wastes and residues, plants (including
18	aquatic plants), grasses, residues, fibers, animal
19	wastes, and municipal wastes; and
20	(2) the term "renewable energy source"
21	means—
22	(A) wind;
23	(B) biomass;
24	(C) a geothermal source;
25	(D) a solar source:

1	(E) a photovoltaic source; or
2	(F) additional hydroelectric generation ca-
3	pacity achieved from increased efficiency at an
4	existing hydroelectric dam.
5	TITLE I—RESEARCH, DEVELOP-
6	MENT, AND DEMONSTRATION
7	SEC. 101. ENHANCED RENEWABLE ENERGY RESEARCH, DE-
8	VELOPMENT, AND DEMONSTRATION.
9	(a) Goals.—In order to achieve the goal stated in
10	section 3, the United States shall have a balanced energy
11	research, development, and demonstration program to en-
12	hance renewable energy with the following goals:
13	(1) For wind power, the program should reduce
14	the cost of wind electricity by 50 percent by 2006,
15	compared to the cost as of the date of the enactment
16	of this Act, so that wind power can be widely com-
17	petitive with fossil-fuel-based electricity in a restruc-
18	tured electric industry, with concentration within the
19	program on a variety of advanced wind turbine con-
20	cepts and manufacturing technologies.
21	(2) For photovoltaics, the programs should pur-
22	sue research, development, and demonstration that
23	would lead to photovoltaic systems prices of \$3,000
24	per kilowatt by January 1, 2003, and \$1,500 per
25	kilowatt by January 1, 2006. Program activities

- should include assisting industry in developing manufacturing technologies, giving greater attention to balance of system issues, and expanding fundamental research on relevant advanced materials.
 - (3) For solar thermal electric systems the program should strengthen ongoing research, development, and demonstration combining high-efficiency and high-temperature receivers with advanced thermal storage and power cycles, with the goal of making solar-only power (including baseload solar power) widely competitive with fossil fuel power by 2015.
 - (4) For geothermal energy, the program should continue work on hydrothermal systems, and reactivate research, development, and demonstration on advanced concepts, giving top priority to high-grade hot dry-rock geothermal energy.
 - (5) For hydrogen-based energy systems, the program should support research, development, and demonstration on hydrogen-using and hydrogen-producing technologies. The program should also coordinate hydrogen-using technology development with proton exchange membrane fuel cell vehicle development activities under the enhanced energy efficiency program described in section 102.

- 1 (6) For hydropower, the program should provide a new generation of turbine technologies that
 3 will increase generating capacity and will be less
 4 damaging to fish and aquatic ecosystems.
- 5 (7) For electric energy and storage, the pro-6 gram should develop high capacity superconducting 7 transmission lines and generators, and develop dis-8 tributed generating systems to accommodate mul-9 tiple types of energy sources under a common inter-10 connect standard.
- 11 (b) AUTHORIZATION OF APPROPRIATIONS.—There 12 are authorized to be appropriated to the Secretary of En-13 ergy for carrying out activities to achieve the goals de-14 scribed in subsection (a)—
- 15 (1) \$420,000,000 for fiscal year 2002;
- 16 (2) \$470,000,000 for fiscal year 2003;
- 17 (3) \$525,000,000 for fiscal year 2004;
- 18 (4) \$585,000,000 for fiscal year 2005; and
- 19 (5) \$655,000,000 for fiscal year 2006.
- 20 SEC. 102. ENHANCED ENERGY EFFICIENCY RESEARCH, DE-
- 21 **VELOPMENT, AND DEMONSTRATION.**
- (a) Goals.—In order to achieve the goal stated in
- 23 section 3, the United States shall have a balanced energy
- 24 research, development, and demonstration program to en-
- 25 hance energy efficiency with the following goals:

1	(1) For energy efficiency in housing, the pro-
2	gram should develop technologies, housing compo-
3	nents, designs, and production methods that will, by
4	2010—
5	(A) reduce the time needed to move tech-
6	nologies to market by 50 percent, compared to
7	the time needed as of the date of the enactment
8	of this Act;
9	(B) reduce the monthly cost of new hous-
10	ing by 20 percent, compared to the cost as of
11	the date of the enactment of this Act;
12	(C) cut the environmental impact and en-
13	ergy use of new housing by 50 percent, com-
14	pared to the impact and use as of the date of
15	the enactment of this Act;
16	(D) ensure that at least 15,000,000 homes
17	existing as of the date of the enactment of this
18	Act reduce their energy use by 30 percent, com-
19	pared to the use as of the date of the enact-
20	ment of this Act; and
21	(E) improve durability and reduce mainte-
22	nance costs by 50 percent compared to the du-
23	rability and costs as of the date of the enact-

ment of this Act.

1	(2) For industrial energy efficiency, the pro-
2	gram should, in cooperation with the affected
3	industries—
4	(A) develop a microturbine (40 to 300 kilo-
5	watt) that is more than 40 percent efficient by
6	2006, compared to the efficiency as of the date
7	of the enactment of this Act;
8	(B) develop a microturbine that is more
9	than 50 percent efficient by 2010, compared to
10	the efficiency as of the date of the enactment
11	of this Act;
12	(C) develop advanced materials for com-
13	bustion systems that reduce emissions of nitro-
14	gen oxides by 30 to 50 percent while increasing
15	efficiency 5 to 10 percent by 2007, compared to
16	such emissions as of the date of the enactment
17	of this Act; and
18	(D) improve the energy intensity of the
19	major energy-consuming industries by at least
20	25 percent by 2010, compared to the energy in-
21	tensity as of the date of the enactment of this
22	Act.
23	(3) For transportation energy efficiency, the
24	program should, in cooperation with affected

industries—

1	(A) develop a production prototype pas-
2	senger automobile that has fuel economy equiv-
3	alent to 80 miles per gallon of gasoline by
4	2004;
5	(B) develop class 7 and 8 heavy duty
6	trucks and buses with ultra low emissions and
7	the ability to use an alternative fuel that has an
8	average fuel economy equivalent to—
9	(i) 10 miles per gallon of gasoline by
10	2007; and
11	(ii) 13 miles per gallon of gasoline by
12	2010;
13	(C) develop a production prototype of a
14	passenger automobile with zero equivalent emis-
15	sions that has an average fuel economy of 100
16	miles per gallon of gasoline by 2010; and
17	(D) improve, by 2010, the average fuel
18	economy of trucks—
19	(i) in classes 1 and 2 by 300 percent;
20	and
21	(ii) in classes 3 through 6 by 200 per-
22	cent,
23	compared to the fuel economy as of the date of
24	the enactment of this Act.
25	(b) DEFINITIONS.—For purposes of this section—

1	(1) the term "alternative fuel" has the meaning
2	given that term in section 301(2) of the Energy Pol-
3	icy Act of 1992; and
4	(2) the term "major energy-consuming indus-
5	tries" means—
6	(A) the forest product industry;
7	(B) the steel industry;
8	(C) the aluminum industry;
9	(D) the metal casting industry;
10	(E) the chemical industry;
11	(F) the petroleum refining industry; and
12	(G) the glass-making industry.
13	(c) Authorization of Appropriations.—There
14	are authorized to be appropriated to the Secretary of En-
15	ergy for carrying out activities to achieve the goals de-
16	scribed in subsection (a), including State and local grants
17	and the Federal Energy Management Program—
18	(1) \$900,000,000 for fiscal year 2002;
19	(2) \$950,000,000 for fiscal year 2003;
20	(3) \$1,025,000,000 for fiscal year 2004;
21	(4) \$1,110,000,000 for fiscal year 2005; and
22	(5) \$1,200,000,000 for fiscal year 2006.

1	SEC. 103. BIOMASS ENERGY AND RELATED CHEMICAL RE-
2	SEARCH, DEVELOPMENT, AND DEMONSTRA-
3	TION.
4	(a) Goals.—In order to achieve the goal stated in
5	section 3, the United States shall have a balanced energy
6	research, development, and demonstration program to en-
7	hance biomass energy and related chemical research, de-
8	velopment, and demonstration with the following goals:
9	(1) The program should enable the United
10	States to triple bioenergy use by 2010.
11	(2) For biomass-based power systems, the pro-
12	gram should enable commercialization, within five
13	years after the date of the enactment of this Act, of
14	integrated power-generating technologies that em-
15	ploy gas turbines and fuel cells integrated with bio-
16	mass gasifiers.
17	(3) For biofuels, the program should accelerate
18	research, development, and demonstration on ad-
19	vanced enzymatic hydrolysis technology for making
20	ethanol from cellulosic feedstock, with the goal that
21	between 2010 and 2015 ethanol produced from en-
22	ergy crops would be fully competitive in terms of
23	price with gasoline as a neat fuel, in either internal
24	combustion engines or fuel cell vehicles.
25	(b) Authorization of Appropriations.—There
26	are authorized to be appropriated to the Secretary of En-

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ergy for carrying out research, development, and dem-
 1
 2
    onstration activities on biomass-related technologies, in-
 3
    cluding transportation, power, and related chemical pro-
 4
    duction technologies, under the Biomass Research and De-
 5
    velopment Act of 2000—
 6
              (1) for biomass transportation—
 7
                  (A) $54,000,000 for fiscal year 2002;
 8
                  (B) $65,000,000 for fiscal year 2003;
 9
                  (C) $78,000,000 for fiscal year 2004;
10
                  (D) $94,000,000 for fiscal year 2005; and
11
                  (E) $113,000,000 for fiscal year 2006;
12
              (2) for biomass power—
13
                  (A) $48,000,000 for fiscal year 2002;
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                  (B) $58,000,000 for fiscal year 2003;
15
                  (C) $70,000,000 for fiscal year 2004;
16
                  (D) $84,000,000 for fiscal year 2005; and
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                  (E) $101,000,000 for fiscal year 2006; and
18
             (3)
                   for
                        biomass
                                   energy-related
                                                    industrial
19
        applications—
20
                  (A) $53,000,000 for fiscal year 2002;
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                  (B) $58,000,000 for fiscal year 2003;
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                  (C) $63,000,000 for fiscal year 2004;
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                  (D) $68,000,000 for fiscal year 2005; and
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                  (E) $73,000,000 for fiscal year 2006.
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ı	SEC.	104.	ASSESSMENT	\mathbf{OF}	RENEWABLE	ENERGY	\mathbf{RE}

- 2 **SOURCES.**
- 3 (a) IN GENERAL.—Not later than one year after the
- 4 date of the enactment of this Act, the Secretary of Energy
- 5 shall submit to the Congress an assessment of all renew-
- 6 able energy resources available for commercial applica-
- 7 tions within the United States.
- 8 (b) Resource Assessment.—Such assessment shall
- 9 include a detailed inventory describing the available
- 10 amount and characteristics of renewable energy sources,
- 11 and an estimate of the research, development, demonstra-
- 12 tion, and commercial applications efforts necessary to de-
- 13 velop each resource. The assessment shall also include
- 14 such other information as the Secretary of Energy believes
- 15 would be useful in achieving wider commercial applications
- 16 of emerging and state-of-the-art renewable energy genera-
- 17 tion facilities or devices.
- 18 (c) AVAILABILITY.—The technology development in-
- 19 formation and cost estimates in the assessment shall be
- 20 updated annually and made available to the public, along
- 21 with the data used to create the assessment.
- 22 (d) AUTHORIZATION OF APPROPRIATIONS.—For the
- 23 purposes of carrying out this section, there are authorized
- 24 to be appropriated to the Secretary of Energy
- 25 \$10,000,000 for fiscal year 2002, and such sums as may
- 26 be necessary for the fiscal years 2003 through 2020.

1	SEC. 105. ENHANCED AERONAUTICAL SYSTEM ENERGY EF-
2	FICIENCY RESEARCH, DEVELOPMENT, AND
3	DEMONSTRATION.
4	(a) Goals.—For aeronautical system energy effi-
5	ciency, the National Aeronautics and Space Administra-
6	tion shall seek to—
7	(1) develop technologies that will enable a 50
8	percent increase in aircraft engine energy efficiencies
9	by 2010 as compared to the most energy efficient
10	engine in the United States commercial aircraft fleet
11	as of the date of the enactment of this Act; and
12	(2) develop air transportation management
13	operational concepts and procedures that will enable
14	a 25 percent increase in the energy efficiency of the
15	overall air transport system on a per flight basis by
16	2010 as compared to the efficiency as of the date of
17	the enactment of this Act.
18	(b) Authorization of Appropriations.—There
19	are authorized to be appropriated to the Administrator of
20	the National Aeronautics and Space Administration for
21	carrying out activities to achieve the goals described in
22	subsection (a)—
23	(1) \$50,000,000 for fiscal year 2002;
24	(2) \$55,000,000 for fiscal year 2003;
25	(3) \$60,000,000 for fiscal year 2004;
26	(4) \$65,000,000 for fiscal year 2005; and

- 1 (5) \$70,000,000 for fiscal year 2006.
- 2 SEC. 106. PROGRESS REPORT.
- The Secretary of Energy shall transmit to the Com-
- 4 mittee on Science of the House of Representatives and the
- 5 Committee on Energy and Natural Resources of the Sen-
- 6 ate an annual report assessing the progress made pursu-
- 7 ant to this title in achieving the goal set forth in section
- 8 3. The first such report shall be transmitted along with
- 9 the first annual budget request from the President occur-
- 10 ring at least 6 months after the date of the enactment
- 11 of this Act.
- 12 SEC. 107. NATIONAL BUILDING PERFORMANCE INITIATIVE.
- 13 (a) Interagency Group.—Not later than 90 days
- 14 after the date of the enactment of this Act, the Director
- 15 of the Office of Science and Technology Policy shall estab-
- 16 lish an Interagency Group responsible for the development
- 17 and implementation of a National Building Performance
- 18 Initiative. The Director of the Office of Science and Tech-
- 19 nology Policy or the Director's designee shall serve as
- 20 Chairperson of the Interagency Group. The membership
- 21 of the Interagency Group shall include representatives the
- 22 National Institute of Standards and Technology, the De-
- 23 partment of Energy, the National Science Foundation, the
- 24 Environmental Protection Agency, and other agencies with
- 25 jurisdiction over energy conservation research and devel-

- 1 opment, buildings, construction, or related issues. The
- 2 Interagency Group shall work to ensure regular agency co-
- 3 ordination and information sharing. The National Insti-
- 4 tute of Standards and Technology shall provide necessary
- 5 administrative support for the Interagency Group.
- 6 (b) Objective.—The objective of the Interagency
- 7 Group shall be to detail the appropriate government role
- 8 in reducing the costs, including energy and health and
- 9 safety related costs, of using, owning, and operating com-
- 10 mercial, institutional, residential, and industrial buildings
- 11 by 30 percent by 2020.
- 12 (c) Plan.—Not later than 270 days after the date
- 13 of the enactment of this Act, the Interagency Group shall
- 14 transmit to the Congress a multiyear implementation plan
- 15 for achieving the objective stated in subsection (b). The
- 16 plan shall address—
- 17 (1) the appropriate Federal Government role in
- achieving the objective, including the elements de-
- scribed in subsection (d);
- 20 (2) research, development, and demonstration
- of new or improved technologies, including the ele-
- 22 ments described in subsection (e);
- 23 (3) better understanding of impediments and
- 24 disincentives to adoption of best practices;

1	(4) dissemination of information on cost-effec-
2	tive and affordable construction and building oper-
3	ation technologies and techniques to industry, State
4	and local governments, homeowners, and the general
5	public, including the elements described in sub-
6	section (f); and
7	(5) incentives for the creation of partnerships
8	between the public and private sectors.
9	The plan shall defer to the private sector and State and
10	local government for implementation in all appropriate in-
11	stances.
12	(d) Federal Role.—The plan required under sub-
13	section (c) shall include—
14	(1) a statement of research, development, and
15	demonstration goals and priorities;
16	(2) the establishment, consistent with this Act,
17	of goals, priorities, and target dates for implementa-
18	tion of the plan;
19	(3) assignment of responsibilities with respect
20	to each element of the plan, avoiding duplication
21	whenever possible and assigning responsibilities to
22	Federal agencies with existing expertise;
23	(4) a description of resources, including staff-
24	ing, needed to carry out the plan; and

- 1 (5) a description of plans for cooperation and 2 coordination in all phases described in the plan with 3 interested governmental entities in the States.
- 4 (e) Research, Development, and Demonstra-5 tion Elements.—The research, development, and dem-6 onstration elements of the plan shall include—
- 7 (1) peer-reviewed research and development on 8 and demonstration of systems and materials for new 9 construction and retrofit, including composite mate-10 rials; building envelope components, including win-11 dows, doors, and roofs; structural design; and design 12 and construction techniques, through physical test-13 ing and through computer simulation when appro-14 priate, taking into consideration cost-effectiveness, 15 affordability, and regional climate differences and 16 susceptibility to natural hazards;
 - (2) development of mechanisms for collecting information on building systems and materials performance and other pertinent information from sources such as the construction industry, insurance companies, and building officials; and
 - (3) development of updatable, cost-effective, and affordable systems, both for new construction and for retrofitting, and for inventorying informa-

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1	tion on components and materials and their inter-
2	action.
3	(f) TECHNOLOGY TRANSFER.—The technology trans-
4	fer elements of the plan shall include—
5	(1) the collection, classification, presentation,
6	and dissemination in a usable form to Federal,
7	State, and local officials, community leaders, the de-
8	sign and construction industry, contractors, home
9	owners, and the general public, of research results
10	and other pertinent information;
11	(2) in coordination with the private sector, aca-
12	demia, and the States, curriculum development and
13	related measures to facilitate the education or train-
14	ing of employees of the design and construction in-
15	dustry, the insurance industry, and State and local
16	governments, and other persons as appropriate; and
17	(3) efforts to increase public awareness and in-
18	formation.
19	(g) Additional Functions.—The Interagency
20	Group established under subsection (a) shall—
21	(1) refine, in conjunction with appropriate rep-
22	resentatives of State and local units of government
23	and private sector organizations, the objective stated
24	in subsection (b) as necessary; and

- 1 (2) develop measurements related to the objec-2 tive, including emphasis on cost-effectiveness and af-3 fordability.
- (h) National Building Performance Advisory Committee.—A National Building Performance Advisory
- Committee shall be established to advise on creation of 6
- the plan, review progress made under the plan, advise on
- 8 any improvements that should be made to the plan, and
- report to the Congress on actions that have been taken
- 10 to advance the Nation's capability to meet the objective
- described in subsection (b). The Advisory Committee shall
- be composed of 21 members to be appointed by the Presi-12
- dent, one of whom shall be designated by the President
- as chair. The members shall include representatives of a 14
- 15 broad cross-section of interests such as the research, tech-
- nology transfer, architectural, engineering, and financial 16
- 17 communities; materials and systems suppliers; State,
- 18 county, and local governments; the residential, multi-
- family, and commercial sectors of the construction indus-19
- try; and the insurance industry. The Advisory Committee 20
- 21 shall coordinate with existing advisory committees of the
- Federal Government and of the National Academies of
- 23 Sciences and Engineering. As appropriate, the work and
- reports of the Advisory Committee may be done in con-
- junction with or replace the work of other advisory com-

- 1 mittees. The Advisory Committee shall not be subject to
- 2 section 14 of the Federal Advisory Committee Act.
- 3 (i) Report.—The Interagency Group shall, within
- 4 90 days after the end of each fiscal year, transmit a report
- 5 to the Congress describing progress achieved during the
- 6 preceding fiscal year by government at all levels and by
- 7 the private sector, toward achieving the objective described
- 8 in subsection (b) and implementing the plan developed
- 9 under subsection (c), and including any amendments to
- 10 the plan. Each such report shall include any recommenda-
- 11 tions for legislative and other action the Interagency
- 12 Group considers necessary and appropriate.

13 TITLE II—COMMERCIAL

14 APPLICATIONS

- 15 SEC. 201. STUDY OF FINANCING FOR PROTOTYPE TECH-
- 16 **NOLOGIES.**
- 17 (a) Independent Assessment.—The Secretary of
- 18 Energy shall commission an independent assessment of in-
- 19 novative financing techniques to facilitate construction of
- 20 new renewable energy and energy efficiency facilities that
- 21 might not otherwise be built in a competitive market.
- 22 (b) Conduct of the Assessment.—The Secretary
- 23 of Energy shall retain an independent contractor with
- 24 proven expertise in financing large capital projects or in

- 1 financial services consulting to conduct the assessment
- 2 under this section.
- 3 (c) Content of the Assessment.—The assess-
- 4 ment shall include a comprehensive examination of all
- 5 available techniques to safeguard private investors against
- 6 risks (including both market-based and government-im-
- 7 posed risks) that are beyond the control of the investors.
- 8 Such techniques may include Federal loan guarantees,
- 9 Federal price guarantees, special tax considerations, and
- 10 direct Federal investment.
- 11 (d) Report.—The Secretary of Energy shall submit
- 12 the results of the independent assessment to the Congress
- 13 not later than 9 months after the date of enactment of
- 14 this section.
- 15 SEC. 202. REGULATORY REVIEWS FOR NEW TECHNOLOGIES
- 16 AND PROCESSES.
- 17 (a) REGULATORY REVIEWS.—Not later than one year
- 18 after the date of the enactment of this Act, and every five
- 19 years thereafter, the Director of the Office of Science and
- 20 Technology Policy shall oversee a review of each Federal
- 21 agency's regulations and policies to identify—
- 22 (1) existing regulations and policies that act as
- barriers to the development and commercialization of
- emerging renewable energy and energy efficiency
- technologies and processes (including fuel cells, com-

1	bined heat and power, distributed generation, and
2	small-scale renewable energy); and
3	(2) actions the agency is taking or could take
4	to—
5	(A) remove barriers to market entry for
6	emerging renewable energy and energy effi-
7	ciency technologies;
8	(B) increase energy efficiency; or
9	(C) encourage the use of new processes to
10	meet energy and environmental goals.
11	(b) Reports to Congress.—Not later than 18
12	months after the date of the enactment of this Act, and
13	every five years thereafter, the Director of the Office of
14	Science and Technology Policy shall report to the Con-
15	gress on the results of the agency reviews conducted under
16	subsection (a).
17	(c) Contents of the Reports.—The reports re-
18	quired under subsection (b) shall—
19	(1) identify all regulatory and policy barriers to
20	the development and commercialization of emerging
21	renewable energy and energy efficiency technologies
22	and processes;
23	(2) actions taken, or proposed to be taken, that
24	are identified under subsection (a)(2): and

1	(3) recommendations for changes in laws or
2	regulations that may be needed to—
3	(A) expedite the siting and development of
4	energy production and distribution facilities;
5	and
6	(B) encourage the adoption of energy effi-
7	ciency and process improvements.
8	SEC. 203. COMMERCIALIZATION ASSISTANCE.
9	(a) AUTHORITY.—The Secretary of Energy shall pro-
10	vide, through a competitive review process, assistance to
11	private sector entities for the commercial application of
12	renewable energy and energy efficiency technologies.
13	(b) APPLICATIONS.—The Secretary of Energy shall
14	establish requirements for applications for assistance
15	under this section. Such applications shall contain a com-
16	mercial application plan, including a description of the fi-
17	nancial, business, and technical support (including sup-
18	port from universities and national laboratories) the appli-
19	cant anticipates in its commercial application effort.
20	(c) Selection.—The Secretary of Energy shall se-
21	lect applicants to receive assistance under this section on
22	the basis of which applications are the most likely to result
23	in commercial application of renewable energy and energy
24	efficiency technologies. The Secretary shall ensure that at

- 1 least 50 percent of the funds provided under this section
- 2 are provided to small businesses or startup companies.
- 3 (d) Authorization of Appropriations.—There
- 4 are authorized to be appropriated to the Secretary of En-
- 5 ergy for carrying out this section \$200,000,000 for each
- 6 of the fiscal years 2002 through 2006, and such sums as
- 7 may be necessary for each of the fiscal years 2007 through
- 8 2020.

9 SEC. 204. EDUCATION AND OUTREACH.

- 10 (a) Program.—The Secretary of Energy shall estab-
- 11 lish a program education and outreach, including innova-
- 12 tive education and outreach techniques, on renewable en-
- 13 ergy and energy efficiency technologies to manufacturers,
- 14 consumers, engineers, architects, builders, energy service
- 15 companies, universities, facility planners and managers,
- 16 State and local governments, and other appropriate enti-
- 17 ties.
- 18 (b) Authorization of Appropriations.—There
- 19 are authorized to be appropriated to the Secretary of En-
- 20 ergy for carrying out this section \$100,000,000 for each
- 21 of the fiscal years 2002 through 2006, and such sums as
- 22 may be necessary for each of the fiscal years 2007 through
- 23 2020.

SEC. 205. PROTON EXCHANGE MEMBRANE DEMONSTRA-

2.	TION PROGRAMS.
<u>~</u>	

(a) In General.—

- ergy, in consultation with the Secretary of Transportation, the Secretary of Defense, and the Secretary of Housing and Urban Development, shall establish a program for the demonstration of fuel cell technologies, including fuel cell proton exchange membrane technology, for commercial, residential, and transportation applications, including buses. Such program shall specifically focus on promoting the application of and improved manufacturing production and processes for fuel cell technologies.
 - (2) AUTHORIZATION OF APPROPRIATIONS.—For the purpose of carrying out this subsection, there are authorized to be appropriated \$140,000,000 for the period encompassing fiscal years 2002 through 2006.

20 (b) Bus Demonstration Program.—

(1) ESTABLISHMENT.—The Secretary of Energy, in consultation with the Secretary of Transportation, shall establish a comprehensive fuel cell bus demonstration program to address hydrogen production, storage, and use in transit bus applications. Such program shall cover all aspects of the introduc-

1	tion of this new technology, and shall include the fol-
2	lowing components:
3	(A) Development, installation, and oper-
4	ation of a hydrogen delivery system located on-
5	site at transit bus terminals.
6	(B) Development, installation, and oper-
7	ation of on-site storage associated with the hy-
8	drogen delivery systems as well as storage tank
9	systems incorporated into the bus itself.
10	(C) Demonstration of use of hydrogen as a
11	practical, safe, renewable energy source in a
12	highly efficient, zero-emission power system for
13	buses.
14	(D) Development of fuel cell power systems
15	that are confirmed and verified as being com-
16	patible with transit bus application require-
17	ments.
18	(E) Durability testing of the fuel cell bus
19	at a national testing facility.
20	(F) Identification and implementation of
21	necessary codes and standards for the safe use
22	of hydrogen as a fuel suitable for bus applica-
23	tion, including the fuel cell power system and

related operational facilities.

1	(G) Identification and implementation of
2	maintenance and overhaul requirements for fuel
3	cell transit buses.
4	(H) Completion of fleet vehicle evaluation
5	program by bus operators along normal transit
6	routes, providing equipment manufacturers and
7	transit operators with the necessary analyses to
8	enable operation of fuel cell buses under a
9	range of operating environments.
10	(2) Domestic assembly.—All fuel cell systems
11	and fuel cell stacks in power plants acquired, or
12	from which power is acquired, under paragraph (1)
13	shall be assembled in the United States.
14	(3) Authorization of appropriations.—For
15	the purpose of carrying out this subsection, there
16	are authorized to be appropriated \$150,000,000 for
17	the period encompassing fiscal years 2002 through
18	2006.
19	TITLE III—REGULATORY
20	PROVISIONS
21	SEC. 301. PUBLIC BENEFITS TRUST FUND.
22	(a) Board.—
23	(1) Establishment.—The Secretary shall es-
24	tablish a National Electric System Public Benefits

1	Board to carry out the functions and responsibilities
2	described in this section.
3	(2) Membership.—The Board shall be com-
4	posed of—
5	(A) 1 representative of the Federal Energy
6	Regulatory Commission appointed by the Fed-
7	eral Energy Regulatory Commission;
8	(B) 2 representatives of the Secretary of
9	Energy appointed by the Secretary of Energy
10	(C) 2 persons nominated by the National
11	Association of Regulatory Utility Commis-
12	sioners and appointed by the Secretary;
13	(D) 1 person nominated by the National
14	Association of State Utility Consumer Advo-
15	cates and appointed by the Secretary;
16	(E) 1 person nominated by the National
17	Association of State Energy Officials and ap-
18	pointed by the Secretary;
19	(F) 1 person nominated by the National
20	Energy Assistance Directors Association and
21	appointed by the Secretary; and
22	(G) 1 representative of the Environmental
23	Protection Agency appointed by the Adminis-
24	trator

1	(3) Chairperson.—The Secretary shall select
2	a member of the Board to serve as Chairperson of
3	the Board.
4	(b) Establishment of Fund.—
5	(1) In general.—The Board shall establish an
6	account or accounts at one or more financial institu-
7	tions, which account or accounts shall be known as
8	the National Electric System Public Benefits Fund
9	(in this section referred to as the "Fund"), con-
10	sisting of amounts deposited in the fund under sub-
11	section (d).
12	(2) STATUS OF FUND.—Amounts collected
13	under subsection (d) and deposited in the Fund—
14	(A) shall not constitute funds of the
15	United States;
16	(B) shall be held in trust by the Board
17	solely for the purposes stated in subsection (c);
18	and
19	(C) shall not be available to meet any obli-
20	gations of the United States.
21	(c) USE OF FUND.—
22	(1) Funding of public benefits pro-
23	GRAMS.—Amounts in the Fund shall be used by the
24	Board to provide matching funds to States and In-

1	dian tribes for the support of State or tribal public
2	benefits programs relating to—
3	(A) renewable energy sources;
4	(B) universal electric service;
5	(C) affordable electric service;
6	(D) energy conservation and efficiency;
7	(E) research and development in areas de-
8	scribed in subparagraphs (A) through (D); or
9	(F) disconnections during periods of ex-
10	treme cold or heat.
11	(2) Distribution.—
12	(A) In General.—Except for amounts
13	needed to pay costs of the Board in carrying
14	out its duties under this section, the Board
15	shall distribute all amounts in the Fund to
16	States or Indian tribes to fund public benefits
17	programs under paragraph (1).
18	(B) Fund share.—
19	(i) In general.—Except as otherwise
20	provided in this subparagraph, the Fund
21	share of a public benefits program funded
22	under paragraph (1) shall not exceed 50
23	percent.
24	(ii) Proportionate reduction.—
25	To the extent that the amount of matching

1	funds requested by States and Indian
2	tribes exceeds the maximum projected rev-
3	enues of the Fund, the matching funds dis-
4	tributed to the States and Indian tribes
5	shall be reduced proportionately.
6	(iii) Additional funding.—A State
7	or Indian tribe may apply funds to public
8	benefits programs in addition to the
9	amount of funds applied for the purpose of
10	matching the Fund share.
11	(3) APPLICATION.—Not later than August 1 of
12	each year beginning in 2002, a State or Indian tribe
13	seeking matching funds for the following fiscal year
14	shall file with the Board, in such form as the Board
15	may require, an application—
16	(A) certifying that the funds will be used
17	for an eligible public benefits program; and
18	(B) stating the amount of State or Indian
19	tribe funds earmarked for the program.
20	(d) Public Benefits Charge.—
21	(1) Amount of Charge.—As a condition of
22	interconnection with facilities of any transmitting
23	utility, the owner of an electric generating facility
24	whose nameplate capacity exceeds five megawatts
25	shall pay the transmitting utility a public benefits

- charge equal to one mill per kilowatt-hour on electric energy generated by such electric generating facility.
- 2 (2) AFFILIATES.—The owner of an electric generating facility subject to the charge under paragraph (1) shall pay the charge even if the generation facility and the transmitting facility are under common ownership or are otherwise affiliated.
 - (3) Imported electric energy, as a condition of interconnection with facilities of any transmitting utility in the United States, shall pay the charge required under paragraph (1) for imported electric energy.
 - (4) PAYMENT OF THE CHARGE.—The transmitting utility shall pay the amounts collected under this subsection to the Board at the close of each month, and the Board shall deposit the amounts into the Fund.
- 18 (e) Report.—One year before the date of expiration 19 of this section, the Secretary of Energy shall report to 20 Congress whether a public benefits fund should continue 21 to exist.
- 22 (f) Expiration.—This section expires after Decem-23 ber 31, 2020.

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1 SEC. 302. NET METERING.

2	Title VI of the Public Utility Regulatory Policies Act
3	of 1978 is amended by adding at the end the following:
4	"SEC. 605. NET METERING FOR RENEWABLE ENERGY AND
5	FUEL CELLS.
6	"(a) Definitions.—For purposes of this section:
7	"(1) The term 'eligible on-site generating facil-
8	ity' means—
9	"(A) a facility on the site of a residential
10	electric consumer with a maximum generating
11	capacity of 100 kilowatts or less that is fueled
12	by solar or wind energy; or
13	"(B) a facility on the site of a commercial
14	electric consumer with a maximum generating
15	capacity of 250 kilowatts or less that is fueled
16	solely by a renewable energy resource.
17	"(2) The term 'renewable energy resource'
18	means solar energy, wind energy, biomass, geo-
19	thermal energy, or fuel cells.
20	"(3) The term 'net metering service' means
21	service to an electric consumer under which elec-
22	tricity generated by that consumer from an eligible
23	on-site generating facility and delivered to the dis-
24	tribution system through the same meter through
25	which purchased electricity is received may be used
26	to offset electricity provided by the retail electric

1	supplier to the electric consumer during the applica-
2	ble billing period so that an electric consumer is
3	billed only for the net electricity consumed during
4	the billing period.
5	"(b) REQUIREMENT TO PROVIDE NET METERING
6	SERVICE.—Each retail electric supplier shall make avail-
7	able upon request net metering service to any retail elec-
8	tric consumer that the supplier currently serves or solicits
9	for service.
10	"(c) Rates and Charges.—
11	"(1) IDENTICAL CHARGES.—A retail electric
12	supplier—
13	"(A) shall charge the owner or operator of
14	an on-site generating facility rates and charges
15	that are identical to those that would be
16	charged other retail electric customers of the
17	electric company in the same rate class; and
18	"(B) shall not charge the owner or oper-
19	ator of an on-site generating facility any addi-
20	tional standby, capacity, interconnection, or
21	other rate or charge.
22	"(2) Measurement.—A retail electric supplier
23	that supplies electricity to the owner or operator of
24	an on-site generating facility shall measure the
25	quantity of electricity produced by the on-site facility

and the quantity of electricity consumed by the owner or operator of an on-site generating facility during a billing period in accordance with normal metering practices.

- "(3) ELECTRICITY SUPPLIED EXCEEDING ELECTRICITY GENERATED.—If the quantity of electricity supplied by a retail electric supplier during a billing period exceeds the quantity of electricity generated by an on-site generating facility and fed back to the electric distribution system during the billing period, the supplier may bill the owner or operator for the net quantity of electricity supplied by the retail electric supplier, in accordance with normal metering practices.
- "(4) ELECTRICITY GENERATED EXCEEDING ELECTRICITY SUPPLIED.—If the quantity of electricity generated by an on-site generating facility during a billing period exceeds the quantity of electricity supplied by the retail electric supplier during the billing period—
 - "(A) the retail electric supplier may bill the owner or operator of the on-site generating facility for the appropriate charges for the billing period in accordance with paragraph (2); and

"(B) the owner or operator of the on-site generating facility shall be credited for the excess kilowatt-hours generated during the billing period, with the kilowatt-hour credit appearing on the bill for the following billing period.

"(d) SAFETY AND PERFORMANCE STANDARDS.—

- "(1) REQUIREMENT.—An eligible on-site generating facility and net metering system used by a retail electric consumer shall meet all applicable safety, performance, reliability, and interconnection standards established by the National Electrical Code, the Institute of Electrical and Electronics Engineers, and Underwriters Laboratories.
- "(2) Additional Control and Testing Re-Quirements.—The Commission, after consultation with State regulatory authorities and nonregulated local distribution systems and after notice and opportunity for comment, may adopt, by rule, additional control and testing requirements for on-site generating facilities and net metering systems that the Commission determines are necessary to protect public safety and system reliability.".

23 SEC. 303. RENEWABLE ENERGY PORTFOLIO STANDARDS.

24 (a) Definition of Covered Generation Facil-25 ITY.—In this section, the term "covered generation facil-

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ity" means a nonhydroelectric facility that generates elec-
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    tric energy for sale.
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         (b) REQUIRED RENEWABLE ENERGY.—Of the total
    amount of electricity sold by covered generation facilities
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    during a calendar year, the amount generated by renew-
    able energy sources shall be not less than—
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 7
              (1) 3.0 percent in 2002;
 8
              (2) 3.5 percent in 2003;
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              (3) 4.0 percent in 2004;
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              (4) 5.0 percent in 2005;
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              (5) 6.0 percent in 2006;
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              (6) 7.0 percent in 2007;
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              (7) 8.0 percent in 2008;
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              (8) 9.0 percent in 2009;
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              (9) 10.0 percent in 2010;
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              (10) 11.0 percent in 2011;
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              (11) 12.0 percent in 2012;
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              (12) 13.0 percent in 2013;
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              (13) 14.0 percent in 2014;
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              (14) 15.0 percent in 2015;
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              (15) 16.0 percent in 2016;
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              (16) 17.0 percent in 2017;
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              (17) 18.0 percent in 2018;
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(18) 19.0 percent in 2019; and

(19) 20.0 percent in 2020 and each year there-
after.
(c) Renewable Energy Credits.—
(1) Identification of energy sources.—
The Federal Energy Regulatory Commission shall
establish standards and procedures under which a
covered generation facility shall certify to a pur-
chaser of electricity—
(A) the amount of the electricity that is
generated by a renewable energy source; and
(B) the amount of the electricity that is
generated by a source other than a renewable
energy source.
(2) Issuance of Renewable energy cred-
ITS.—Not later than April 1 of each year, beginning
in 2003, the Federal Energy Regulatory Commission
shall issue to a covered generation facility 1 renew-
able energy credit for each megawatt-hour of elec-
tricity sold by the covered generation facility in the
preceding calendar year that was generated by a re-
newable energy source.
(3) Submission of Renewable energy
CREDITS.—Not later than July 1 of each year, a
covered generation facility shall submit credits to the

Federal Energy Regulatory Commission in an

1	amount equal to the total number of megawatt-hours
2	of electricity sold by the covered generation facility
3	in the preceding year multiplied by the applicable re-
4	newable energy source requirement under subsection
5	(a).
6	(4) Use of renewable energy credits.—
7	(A) Time for use.—A renewable energy
8	credit shall be used for the calendar year for
9	which the renewable energy credit is issued.
10	(B) Permitted Uses.—Until July 1 of
11	the year in which a renewable energy credit was
12	issued, a covered generation facility may—
13	(i) use the renewable energy credit to
14	make a submission to the Federal Energy
15	Regulatory Commission under paragraph
16	(3); or
17	(ii) on notice to the Federal Energy
18	Regulatory Commission, sell or otherwise
19	transfer a renewable energy credit to an-
20	other covered generation facility.
21	(d) Recordkeeping.—The Federal Energy Regu-
22	latory Commission shall maintain records of all renewable
23	energy credits issued and all credits sold or transferred.
24	(e) Penalties.—

1	(1) In General.—The Federal Energy Regu-
2	latory Commission may bring an action in United
3	States district court to impose a civil penalty on any
4	person that fails to comply with subsection $(c)(3)$.
5	(2) Amount of Penalty.—A person that fails
6	to comply with a requirement to submit renewable
7	energy credits under subsection (c)(3) shall be sub-
8	ject to a civil penalty of not more than 3 times the
9	estimated national average market value (as deter-
10	mined by the Federal Energy Regulatory Commis-
11	sion) for the calendar year concerned of the quantity
12	of renewable energy credits that person is required
13	to submit for the applicable fiscal year.
13	to subtility for the applicable fiscal year.
14	SEC. 304. HIGH PERFORMANCE SCHOOLS.
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14	SEC. 304. HIGH PERFORMANCE SCHOOLS.
14 15	SEC. 304. HIGH PERFORMANCE SCHOOLS. (a) PROGRAM ESTABLISHMENT AND ADMINISTRA-
141516	SEC. 304. HIGH PERFORMANCE SCHOOLS. (a) PROGRAM ESTABLISHMENT AND ADMINISTRATION.—
14151617	SEC. 304. HIGH PERFORMANCE SCHOOLS. (a) PROGRAM ESTABLISHMENT AND ADMINISTRATION.— (1) ESTABLISHMENT.—There is established in
1415161718	SEC. 304. HIGH PERFORMANCE SCHOOLS. (a) PROGRAM ESTABLISHMENT AND ADMINISTRATION.— (1) ESTABLISHMENT.—There is established in the Department of Energy the High Performance
141516171819	SEC. 304. HIGH PERFORMANCE SCHOOLS. (a) PROGRAM ESTABLISHMENT AND ADMINISTRATION.— (1) ESTABLISHMENT.—There is established in the Department of Energy the High Performance Schools Program (in this section referred to as the
14151617181920	SEC. 304. HIGH PERFORMANCE SCHOOLS. (a) PROGRAM ESTABLISHMENT AND ADMINISTRATION.— (1) ESTABLISHMENT.—There is established in the Department of Energy the High Performance Schools Program (in this section referred to as the "Program").
14 15 16 17 18 19 20 21	SEC. 304. HIGH PERFORMANCE SCHOOLS. (a) PROGRAM ESTABLISHMENT AND ADMINISTRATION.— (1) ESTABLISHMENT.—There is established in the Department of Energy the High Performance Schools Program (in this section referred to as the "Program"). (2) IN GENERAL.—The Secretary of Energy
14 15 16 17 18 19 20 21 22	SEC. 304. HIGH PERFORMANCE SCHOOLS. (a) PROGRAM ESTABLISHMENT AND ADMINISTRATION.— (1) ESTABLISHMENT.—There is established in the Department of Energy the High Performance Schools Program (in this section referred to as the "Program"). (2) IN GENERAL.—The Secretary of Energy may, through the Program, make grants—

1	school buildings that are healthful, productive,
2	energy efficient, and environmentally sound;
3	(B) to State energy offices to administer
4	the program of assistance to school districts
5	pursuant to this section; and
6	(C) to State energy offices to promote par-
7	ticipation by school districts in the Program.
8	(3) Grants to assist school districts.—
9	Grants under paragraph (2)(A) for new school build-
10	ings shall be used to achieve energy efficiency per-
11	formance that reduces energy use at least 30 percent
12	below that of a school constructed in compliance
13	with standards prescribed in Chapter 8 of the 2000
14	International Energy Conservation Code, or a simi-
15	lar State code intended to achieve substantially
16	equivalent results. Grants under paragraph (2)(A)
17	for existing school buildings shall be used to achieve
18	energy efficiency performance that reduces energy
19	use below the school's baseline consumption, assum-
20	ing a 3-year, weather-normalized average for calcu-
21	lating such baseline. Grants under paragraph (2)(A)
22	shall be made to school districts that have—
23	(A) demonstrated a need for such grants
24	in order to respond appropriately to increasing

elementary and secondary school enrollments or

1	to make major investments in renovation of
2	school facilities; and
3	(B) made a commitment to use the grant
4	funds to develop high performance school build-
5	ings in accordance with a plan developed and
6	approved pursuant to paragraph (5)(A).
7	(4) Other Grants.—
8	(A) Grants for administration.—
9	Grants under paragraph (2)(B) shall be used to
10	evaluate compliance by school districts with the
11	requirements of this section, and in addition
12	may be used for—
13	(i) distributing information and mate-
14	rials to clearly define and promote the de-
15	velopment of high performance school
16	buildings for both new and existing facili-
17	ties;
18	(ii) organizing and conducting pro-
19	grams for school board members, school
20	district personnel, architects, engineers,
21	and others to advance the concepts of high
22	performance school buildings;
23	(iii) obtaining technical services and
24	assistance in planning and designing high
25	performance school buildings; and

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1	(iv) collecting and monitoring data
2	and information pertaining to the high per-
3	formance school building projects.
4	(B) Grants to promote participa-
5	TION.—Grants under paragraph (2)(C) may be
6	used for promotional and marketing activities,
7	including facilitating private and public financ-
8	ing, promoting the use of energy service compa-
9	nies, working with school administrations, stu-
10	dents, and communities, and coordinating pub-
11	lie benefit programs.
12	(5) Implementation.—
13	(A) Plans.—A grant under paragraph
14	(2)(A) shall be provided only to a school district
15	that, in consultation with its State office of en-
16	ergy and education, has developed a plan that
17	the State energy office determines to be feasible
18	and appropriate in order to achieve the pur-
19	poses for which such grants are made.
20	(B) Supplementing grant funds.—
21	State energy offices shall encourage qualifying
22	school districts to supplement their grant funds
23	with funds from other sources in the implemen-

(b) Allocation of Funds.—

tation of their plans.

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1 (1) In general.—Except as provided in paragraph (3), funds appropriated to carry out this sec-2 3 tion shall be provided to State energy offices. 4 (2) Purposes.—Except as provided in para-5 graph (3), funds appropriated to carry out this sec-6 tion shall be allocated as follows: 7 (A) Seventy percent shall be used to make 8 grants under subsection (a)(2)(A). 9 (B) Fifteen percent shall be used to make 10 grants under subsection (a)(2)(B). 11 (C) Fifteen percent shall be used to make 12 grants under subsection (a)(2)(C). 13 (3) Other funds.—The Secretary of Energy 14 may retain not to exceed \$300,000 per year from 15 amounts appropriated under subsection (c) to assist 16 State energy offices in coordinating and imple-17 menting the Program. Such funds may be used to 18 develop reference materials to further define the 19 principles and criteria to achieve high performance 20 school buildings. 21 (c) AUTHORIZATION OF APPROPRIATIONS.—There 22 are authorized to be appropriated to the Secretary of En-23 ergy to carry out this section \$200,000,000 for each of

the fiscal years 2002 through 2006, and such sums as may

- 1 be necessary for each of the fiscal years 2007 through
- 2 2020.
- 3 (d) Report to Congress.—The Secretary of En-
- 4 ergy shall conduct a biennial review of State actions imple-
- 5 menting this section, and the Secretary shall report to
- 6 Congress on the results of such reviews. In conducting
- 7 such reviews, the Secretary shall assess the effectiveness
- 8 of the calculation procedures used by the States in estab-
- 9 lishing eligibility of schools for funding under this section,
- 10 and may assess other aspects of the State program to de-
- 11 termine whether they have been effectively implemented.
- (e) Definitions.—For purposes of this section:
- 13 (1) Elementary and Secondary School.—
- 14 The terms "elementary school" and "secondary
- school" shall have the same meaning given such
- terms in paragraphs (14) and (26) of section 14101
- of the Elementary and Secondary Education Act of
- 18 1965 (20 U.S.C. 8801(14), (26)).
- 19 (2) High performance school building.—
- The term "high performance school building" means
- a school building which, in its design, construction,
- operation, and maintenance, maximizes use of re-
- 23 newable energy and energy efficiency practices, is
- cost-effective on a life cycle basis, uses affordable,
- environmentally preferable, durable materials, en-

- hances indoor environmental quality, protects and
 conserves water, and optimizes site potential.
- 3 (3) Renewable energy.—The term "renew-4 able energy" means energy produced by solar, wind, 5 geothermal, photovoltaic, fuel cell, or biomass power.

6 SEC. 305. HIGH PERFORMANCE SCHOOLS RESEARCH.

- 7 (a) Program Authorized.—The Director of the
- 8 National Science Foundation (in this section referred to
- 9 as the "Director") shall establish a competitive, merit-
- 10 based research program to investigate how the character-
- 11 istics of the physical environment of elementary and sec-
- 12 ondary schools affect student educational achievement.

13 (b) Program Requirements.—

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- (1) Research projects.—Awards made under subsection (a) shall be for research projects that focus on the quantification of the effects on student educational achievement of lighting, noise, temperature and ventilation, general upkeep, and other characteristics of the physical environment of school classrooms. The research projects shall be designed to separate the effects of the key variables that influence student educational achievement in order to isolate the effects of the environmental variables.
 - (2) Assessments.—For awards made under subsection (a), the Director shall ensure that each

- 1 research project specifies appropriate procedures to
- 2 make assessments of student educational achieve-
- 3 ment. Such assessments shall be carried out over a
- 4 multiyear period.
- 5 (3) Dissemination of Findings.—The Direc-
- 6 tor may sponsor and support workshops, con-
- 7 ferences, and dedicated web sites to disseminate in-
- 8 formation to school administrators about the find-
- 9 ings of research projects carried out under sub-
- section (a).
- 11 (c) Guidelines, Procedures, and Criteria.—
- 12 The Director shall establish and publish application and
- 13 selection guidelines, procedures, and criteria for the pro-
- 14 gram established under subsection (a).
- 15 (d) AUTHORIZATION OF APPROPRIATIONS.—There
- 16 are authorized to be appropriated to the National Science
- 17 Foundation to carry out this section \$2,000,000 for each
- 18 of the fiscal years 2002, 2003, and 2004.
- 19 SEC. 306. VEHICLE FUEL ECONOMY STANDARDS.
- 20 (a) Increased Average Fuel Economy Stand-
- 21 ARD FOR LIGHT TRUCKS.—
- 22 (1) Definition of Light Truck.—Section
- 32901(a) of title 49, United States Code, is amend-
- ed by adding at the end the following new para-
- 25 graph:

1	"(17) 'light truck' has the meaning given that
2	term in regulations prescribed by the Secretary of
3	Transportation in the administration of this chap-
4	ter.".
5	(2) Requirement for increased stand-
6	ARD.—Section 32902(a) of title 49, United States
7	Code, is amended—
8	(A) by inserting "(1)" after "AUTO-
9	MOBILES.—";
10	(B) by inserting before the period at the
11	end of the third sentence the following: ", sub-
12	ject to paragraph (2)"; and
13	(C) by adding at the end the following new
14	paragraph:
15	"(2) The average fuel economy standard for light
16	trucks manufactured by a manufacturer may not be less
17	than 27.5 miles per gallon, except that the average fuel
18	economy standard for—
19	"(A) light trucks manufactured by a manufac-
20	turer in a model year after model year 2002 and be-
21	fore model year 2005 may not be less than 22.5
22	miles per gallon; and
23	"(B) light trucks manufactured by a manufac-
24	turer in a model year after model year 2004 and be-

- fore model year 2007 may not be less than 25 miles per gallon.".
- 3 (3) APPLICABILITY.—Paragraph (2) of section 4 32902(a) of such title does not apply with respect to 5 light trucks manufactured before model year 2003.
- 6 (b) Fuel Economy Standards for Automobiles 7 up to 10,000 Pounds Gross Vehicle Weight.—
- 8 (1) Vehicles defined as automobiles.—
 9 Section 32901(a)(3) of title 49, United States Code,
 10 is amended by striking "and rated at—" and all
 11 that follows through the end and inserting "and is
 12 rated at not more than 10,000 pounds gross vehicle
 13 weight.".
- 14 (2) EFFECTIVE DATE.—The amendment made 15 by paragraph (1) shall take effect on January 1, 16 2007.
- 17 (c) Fuel Economy of the Federal Fleet of 18 Vehicles.—
- 19 (1) BASELINE AVERAGE FUEL ECONOMY.—The
 20 head of each executive agency shall determine, for
 21 each class of vehicles that are in the agency's fleet
 22 of vehicles in fiscal year 2001, the average fuel econ23 omy for all of the vehicles in that class that are in
 24 the agency's fleet of vehicles for that fiscal year. For
 25 the purposes of this subsection, the average fuel

- economy so determined for the agency's vehicles in a class of vehicles shall be the baseline average fuel economy for the agency's fleet of vehicles in that class.
 - (2) Increase of average fuel economy.—
 The head of an executive agency shall manage the procurement of vehicles in each class of vehicles for that agency in such a manner that—
 - (A) not later than September 30, 2003, the average fuel economy of the new vehicles in the agency's fleet of vehicles in each class of vehicles is not less than 3 miles per gallon higher than the baseline average fuel economy determined for that class; and
 - (B) not later than September 30, 2005, the average fuel economy of the new vehicles in the agency's fleet of vehicles in each class of vehicles is not less than 6 miles per gallon higher than the baseline average fuel economy determined for that class.
 - (3) CALCULATION OF AVERAGE FUEL ECON-OMY.—Average fuel economy shall be calculated for the purposes of this subsection in accordance with guidance which the Secretary of Transportation

1 shall prescribe for the implementation of this sub-2 section. 3 (4) Definitions.—In this subsection: (A) The term "class of vehicles" means a 4 class of vehicles for which an average fuel econ-5 6 omy standard is in effect under chapter 329 of 7 title 49, United States Code. (B) The term "executive agency" has the 8 9 meaning given the term in section 4(1) of the 10 Office of Federal Procurement Policy Act (41) 11 U.S.C. 403(1)). 12 (C) The term "new vehicle", with respect 13 to the fleet of vehicles of an executive agency, 14 means a vehicle procured by or for the agency 15 after September 30, 2002. 16 SEC. 307. ENERGY STAR PROGRAM. 17 (a) ESTABLISHMENT.—There shall be established, as a jointly administered program of the Environmental Pro-18 19 tection Agency and the Department of Energy, an Energy 20 Star program to identify, establish standards for, and pro-21 mote cost-effective, energy-efficient products and buildings for government, industrial, commercial, and individual en-23 ergy users. Such program shall be conducted so that En-

ergy Star labels for each product and building system, de-

- 1 sign, or product represents a standard of high quality and
- 2 solid scientific basis.
- 3 (b) Memorandum of Understanding.—Not later
- 4 than 3 months after the date of the enactment of this Act,
- 5 the Administrator of the Environmental Protection Agen-
- 6 cy and the Secretary of Energy shall enter into and trans-
- 7 mit to the Congress a memorandum of understanding de-
- 8 lineating the respective responsibilities of the Environ-
- 9 mental Protection Agency and the Department of Energy
- 10 for the Energy Star program.
- 11 (c) Consolidation Report.—Not later than 6
- 12 months after the date of the enactment of this Act, the
- 13 Administrator of the Environmental Protection Agency
- 14 and the Secretary of Energy shall jointly transmit to the
- 15 Congress a report on the consolidation of standards for
- 16 energy-efficient products and building systems, designs,
- 17 and products for government, industrial, commercial, and
- 18 individual energy users. Such report shall include an as-
- 19 sessment of—
- 20 (1) standards established by private sector
- 21 standards organizations and by Federal agencies;
- 22 and
- 23 (2) how the Energy Star program should co-
- ordinate its efforts with such organizations and
- agencies to establish a uniform standard for each

1 type of product or building system, design, or prod-2 uct that is designated with an Energy Star label. 3 (d) Annual Report.—The Administrator of the Environmental Protection Agency and the Secretary of En-5 ergy shall jointly transmit to the Congress an annual report containing— 6 7 (1) a description of the activities of the Envi-8 ronmental Protection Agency and the Department of 9 Energy through the Energy Star program; and 10 (2) goals for the future of the Energy Star pro-11 gram. 12 (e) AUTHORIZATION OF APPROPRIATIONS.—For pur-13 poses of carrying out the Energy Star program, there are 14 authorized to be appropriated— 15 (1) to the Administrator of the Environmental 16 Protection Agency \$75,000,000 for fiscal year 2002 17 and \$100,000,000 for fiscal year 2003; and 18 (2) to the Secretary of Energy \$3,000,000 for 19 fiscal year 2002 and \$5,000,000 for fiscal year 20 2003. 21 SEC. 308. FUEL EFFICIENT TIRE PROGRAM. 22 Section 30123 of title 49, United States Code, is 23 amended— 24 (1) in subsection (b)—

1	(A) by inserting "(1)" before the first sen-
2	tence; and
3	(B) by adding at the end the following:
4	"(2) The uniform quality system shall include stand-
5	ards for rating tires for the following:
6	"(A) Treadwear.
7	"(B) Traction.
8	"(C) Temperature resistance.
9	"(D) Rolling resistance and fuel economy.";
10	and
11	(2) by adding at the end the following:
12	"(d) National Tire Fuel Efficiency Pro-
13	GRAM.—(1) The Secretary shall, after consulting with the
14	Administrator of the Environmental Protection Agency,
15	industry representatives, and other appropriate organiza-
16	tions, develop a national tire fuel efficiency program that
17	will develop fuel efficiency ratings and label requirements
18	for tires.
19	"(2) The program shall include—
20	"(A) specifications for testing procedures and
21	labels that will enable tire buyers to make more in-
22	formed purchasing decisions about the fuel efficiency
23	of tires;
24	"(B) dissemination of information through la-
25	bels, catalogs, trade publications, or other mecha-

1 nisms, that will allow tire buyers to assess the en-2 ergy consumption and potential costs savings of al-3 ternative tire products; "(C) by no later than September 30, 2002, de-5 velopment by the Secretary of recommendations for 6 minimum fuel efficiency standards for tires; and "(D) by no later than January 1, 2003, pre-7 8 scription by the Secretary of minimum fuel efficiency 9 standards for tires. 10 "(3) Recommendations and standards under para-11 graph (2) (C) and (D), respectively, shall— "(A) be designed to ensure that the fuel effi-12 13 ciency of replacement tires is equal to or better than 14 the fuel efficiency of tires sold as original equipment 15 on new vehicles; "(B) consider all safety implications; and 16 17 "(C) ensure the standards do not adversely im-18 pact tire safety.". 19 SEC. 309. ENVIRONMENTAL DISCLOSURE TO CONSUMERS. 20 (a) Retail Sales.—The Federal Trade Commission 21 shall issue rules requiring each retail electric supplier to 22 include with each monthly billing to retail electric con-23 sumers a statement of the known energy sources used to generate the electricity the supplier distributes, on an an-

nual basis, stated in numbers of kilowatt-hours, both in

- 1 percentages and in the form of a pie chart, of biomass
- 2 power, coal-fired power, hydropower, natural gas-fired
- 3 power, nuclear power, oil-fired power, wind power, geo-
- 4 thermal power, solar thermal power, photovoltaic power,
- 5 combined heat and power, and other sources of power, re-
- 6 spectively.
- 7 (b) Wholesale Sales.—The Federal Trade Com-
- 8 mission shall issue rules requiring any electric supplier
- 9 that sells or makes an offer to sell electric energy at whole-
- 10 sale to provide the purchaser or offeree such known infor-
- 11 mation about the energy source used to generate the elec-
- 12 tricity, on an annual basis, as the Commission may deter-
- 13 mine.
- 14 (c) Certification Program.—The Secretary of
- 15 Energy, in consultation with the Federal Trade Commis-
- 16 sion, shall develop a certification program for each retail
- 17 electric supplier that sells electric energy, at least 50 per-
- 18 cent of which, averaged over a year, is generated from re-
- 19 newable energy sources. For purposes of this subsection,
- 20 the term "renewable energy source" means biomass, wind
- 21 power, geothermal power, solar thermal power, or photo-
- 22 voltaic power.

1 TITLE IV—FEDERAL 2 GOVERNMENT PROGRAMS

3 SEC. 401. ENERGY SAVINGS MEASURES IN CAPITOL.

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- (a) REQUIREMENTS.—The Architect of the Capitol—
- 5 (1) shall develop and implement a cost-effective 6 energy conservation strategy for all facilities cur-7 rently administered by Congress to achieve a net re-8 duction of 25 percent in energy consumption on the 9 congressional campus compared to fiscal year 1991 10 consumption levels on a Btu-per-gross-square-foot 11 basis not later than 4 years after the date of the en-12 actment of this Act;
 - (2) shall submit to Congress not later than 10 months after the date of the enactment of this Act a comprehensive energy conservation and management plan which includes life cycle cost methods to determine the cost-effectiveness of proposed energy efficiency projects;
 - (3) shall present to Congress annually a report on congressional energy management and conservation programs which details energy expenditures and cost estimates for each facility, energy management and conservation projects, and future priorities to ensure compliance with the requirements of this section;

- 1 (4) shall perform energy surveys of all congres-2 sional buildings and update such surveys as needed;
 - (5) shall use such surveys to determine the cost and payback period of energy and water conservation measures likely to achieve the energy consumption levels contained in the strategy developed under paragraph (1);
 - (6) shall install energy and water conservation measures that will achieve such levels through life cycle cost methods and procedures included in the plan submitted under paragraph (2);
 - (7) may contract with nongovernmental entities and employ private sector capital to finance energy conservation projects and achieve energy consumption targets;
 - (8) may develop innovative contracting methods that will attract private sector funding for the installation of energy-efficient and renewable energy technology to meet the requirements of this section;
 - (9) may participate in the Department of Energy's Financing Renewable Energy and Efficiency (FREE Savings) contracts program for Federal Government facilities;
- 24 (10) within 100 days after the date of the en-25 actment of this Act, shall submit to Congress the re-

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- sults of a study of the installation of sub-metering in buildings on the congressional campus;
- 3 (11) shall produce information packages and 4 "how-to" guides for each Member and employing au-5 thority of Congress that detail simple, cost-effective 6 methods to save energy and taxpayer dollars;
 - (12) shall work with the Department of Energy's Federal Energy Management Program and appropriate manufacturers, local utilities, trade associations, and national laboratories to identify and demonstrate innovative new renewable energy or energy efficiency technologies in the Visitor's Center, as allowed by the Visitor's Center design parameters; and
- 15 (13) shall include in the Visitor's Center an ex-16 hibit on the energy efficiency measures employed in 17 the congressional campus.
- 18 (b) Repeal.—Section 310 of the Legislative Branch 19 Appropriations Act, 1999 (40 U.S.C. 166i) is repealed.
- 20 SEC. 402. ENERGY SAVINGS PERFORMANCE CONTRACTS.
- 21 (a) Cost Savings From Replacement Facili-
- 22 Ties.—Section 801(a) of the National Energy Conserva-
- 23 tion Policy Act (42 U.S.C. 8287(a)) is amended by adding
- 24 at the end the following:

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1 "(3)(A) In the case of an energy savings con-2 tract or energy savings performance contract pro-3 viding for energy savings through the construction and operation of one or more buildings or facilities 5 to replace one or more existing buildings or facilities, 6 benefits ancillary to the purpose of such contract 7 under paragraph (1) may include savings resulting 8 from reduced costs of operation and maintenance at 9 such replacement buildings or facilities when com-10 pared with costs of operation and maintenance at 11 the buildings or facilities being replaced.

- "(B) Notwithstanding paragraph (2)(B), aggregate annual payments by an agency under an energy savings contract or energy savings performance contract referred to in subparagraph (A) may take into account (through the procedures developed pursuant to this section) savings resulting from reduced costs of operation and maintenance as described in subparagraph (A).".
- 20 (b) Repeal of Sunset.—Section 801(c) of the Na-
- 21 tional Energy Conservation Policy Act (42 U.S.C.
- 22 8287(c)) is repealed.
- 23 (c) Energy Savings Performance Contract
- 24 Definitions.—

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1	(1) Energy savings.—Section 804(2) of the
2	National Energy Conservation Policy Act (42 U.S.C.
3	8287c(2)) is amended to read as follows:
4	"(2) The term 'energy savings' means a reduc-
5	tion in the cost of energy or water, from a base cost
6	established through a methodology set forth in the
7	contract, used in either—
8	"(A) an existing federally owned building
9	or buildings or other federally owned facilities
10	as a result of—
11	"(i) the lease or purchase of operating
12	equipment, improvements, altered oper-
13	ation and maintenance, or technical serv-
14	ices;
15	"(ii) the increased efficient use of ex-
16	isting energy sources by cogeneration or
17	heat recovery, excluding any cogeneration
18	process for other than a federally owned
19	building or buildings or other federally
20	owned facilities; or
21	"(iii) the increased efficient use of ex-
22	isting water sources; or
23	"(B) a replacement facility under section
24	801(a)(3).".

1	(2) Energy savings contract.—Section
2	804(3) of the National Energy Conservation Policy
3	Act (42 U.S.C. 8287c(3)) is amended to read as fol-
4	lows:
5	"(3) The terms 'energy savings contract' and
6	'energy savings performance contract' mean a con-
7	tract which provides for—
8	"(A) the performance of services for the
9	design, acquisition, installation, testing, oper-
10	ation, and, where appropriate, maintenance and
11	repair, of an identified energy or water con-
12	servation measure or series of measures at one
13	or more locations; or
14	"(B) energy savings through the construc-
15	tion and operation of one or more buildings or
16	facilities to replace one or more existing build-
17	ings or facilities.".
18	(3) Energy or water conservation meas-
19	URE.—Section 804(4) of the National Energy Con-
20	servation Policy Act (42 U.S.C. 8287c(4)) is amend-
21	ed to read as follows:
22	"(4) The term 'energy or water conservation
23	measure' means—

1	"(A) an energy conservation measure, as
2	defined in section 551(4) (42 U.S.C. 8259(4));
3	or
4	"(B) a water conservation measure that
5	improves water efficiency, is life cycle cost effec-
6	tive, and involves water conservation, water re-
7	cycling or reuse, improvements in operation or
8	maintenance efficiencies, retrofit activities or
9	other related activities, not at a Federal hydro-
10	electric facility.".
11	(4) Conforming Amendment.—Section
12	801(a)(2)(C) of the National Energy Conservation
13	Policy Act (42 U.S.C. 8287(a)(2)(C)) is amended by
14	inserting "or water" after "finance energy".
15	SEC. 403. FEDERAL PURCHASE REQUIREMENT.
16	The President shall ensure that, of the total amount
17	of electric power the Federal Government purchases dur-
18	ing any fiscal year—
19	(1) not less than 3 percent in fiscal years 2002
20	through 2004;
21	(2) not less than 5 percent in fiscal years 2005
22	through 2009;
23	(3) not less than 7.5 percent in fiscal years
24	2010 through 2019; and

- 1 (4) not less than 20 percent in fiscal year 2020
- 2 and each fiscal year thereafter,
- 3 shall be electric power generated by a renewable energy
- 4 source.

5 SEC. 404. FEDERAL BUILDINGS ENERGY EFFICIENCY.

- 6 (a) MINIMUM REQUIREMENT.—Any federally owned
- 7 or leased building for which a contract for construction
- 8 or major retrofit is entered into after the date of the en-
- 9 actment of this Act shall be required to achieve energy
- 10 efficient design standards that exceed by at least 30 per-
- 11 cent the standards contained in Standard 90.1–1999 of
- 12 the American Society of Heating, Refrigerating, and Air-
- 13 Conditioning Engineers.
- 14 (b) ALTERNATIVE STANDARDS.—The Secretary may
- 15 establish a requirement for stricter standards than those
- 16 required by subsection (a) where local climate conditions
- 17 or other circumstances so warrant.

18 SEC. 405. RETENTION OF SAVINGS.

- 19 A Federal agency that is authorized by law to retain
- 20 a portion of savings resulting from efficient energy and
- 21 water management shall permit the retention of the sav-
- 22 ings at the facility or site where the savings occur to pro-
- 23 vide greater incentive for facility and site managers to un-
- 24 dertake energy and water management initiatives, invest

- 1 in renewable energy systems, and purchase electricity from
- 2 renewable energy sources.

3 SEC. 406. GUARANTEED ENERGY SAVINGS.

- 4 Section 546(a) of the National Energy Conservation
- 5 Policy Act (42 U.S.C. 8256(a)) is amended by adding at
- 6 the end the following new paragraph:
- 7 "(3) A contract entered into under this subsection
- 8 shall provide for a guarantee of energy savings to the
- 9 agency, shall establish payment schedules reflecting such
- 10 guarantee, taking into account any capital costs under the
- 11 contract, and shall provide for monitoring and verification
- 12 of the energy savings.".

13 SEC. 407. PRESIDENT'S MANAGEMENT COUNCIL.

- 14 The President's Management Council shall periodi-
- 15 cally assess the progress of Federal agencies in improving
- 16 energy management.

17 SEC. 408. FEDERAL USE OF ENERGY STAR STANDARDS.

- 18 (a) Requirement.—Each Federal agency, in acquir-
- 19 ing energy-using products, or in acquiring building sys-
- 20 tems, designs, or products, shall acquire Energy Star
- 21 products, systems, or designs. If Energy Star products,
- 22 systems, or designs are not available, the Federal agency
- 23 shall acquire products, systems, or designs designated as
- 24 among the top 25 percent of such type of product, system,
- 25 or design under the Federal Energy Management Pro-

- 1 gram, or other appropriate standards-setting organiza-
- 2 tions.
- 3 (b) Availability.—The General Services Adminis-
- 4 tration and the Defense Logistics Agency shall ensure that
- 5 Energy Star products, systems, and designs are made
- 6 known and readily available to Federal agencies for acqui-
- 7 sition.

8 TITLE V—TAX PROVISIONS

- 9 SEC. 500. AMENDMENT OF 1986 CODE.
- Except as otherwise expressly provided, whenever in
- 11 this title an amendment or repeal is expressed in terms
- 12 of an amendment to, or repeal of, a section or other provi-
- 13 sion, the reference shall be considered to be made to a
- 14 section or other provision of the Internal Revenue Code
- 15 of 1986.

16 Subtitle A—Energy-Efficient

17 **Property Used in Business**

- 18 SEC. 501. CREDIT FOR CERTAIN ENERGY-EFFICIENT PROP-
- 19 ERTY USED IN BUSINESS.
- 20 (a) IN GENERAL.—Subpart E of part IV of sub-
- 21 chapter A of chapter 1 (relating to rules for computing
- 22 investment credit) is amended by inserting after section
- 23 48 the following:

1 "SEC. 48A. ENERGY CREDIT.

2	"(a) In General.—For purposes of section 46, the
3	energy credit for any taxable year is the energy percentage
4	of the basis of each energy property placed in service dur-
5	ing such taxable year.
6	"(b) Energy Percentage.—
7	"(1) IN GENERAL.—The energy percentage is—
8	"(A) except as otherwise provided in this
9	paragraph, 10 percent,
10	"(B) in the case of energy property de-
11	scribed in clauses (i), (iii), and (vi) of sub-
12	section (c)(1)(A), 20 percent,
13	"(C) in the case of energy property de-
14	scribed in subsection (c)(1)(A)(v), 15 percent,
15	"(D) in the case of energy property de-
16	scribed in subsection $(c)(1)(A)(ii)$ relating to a
17	high risk geothermal well, 20 percent,
18	"(E) in the case of energy property de-
19	scribed in subsection (c)(1)(A)(vii), 30 percent,
20	and
21	"(F)(i) in the case of a small employer
22	with respect to the energy property described in
23	subsection (e)(1)(A)(viii), 30 percent, and
24	"(ii) in the case of energy property de-
25	scribed in subsection $(c)(1)(A)(viii)$ other than
26	with respect to a small employer, 0 percent.

1	"(2) Coordination with rehabilitation.—
2	The energy percentage shall not apply to that por-
3	tion of the basis of any property which is attrib-
4	utable to qualified rehabilitation expenditures.
5	"(c) Energy Property Defined.—
6	"(1) In general.—For purposes of this sub-
7	part, the term 'energy property' means any
8	property—
9	"(A) which is—
10	"(i) solar energy property,
11	"(ii) geothermal energy property,
12	"(iii) energy-efficient building prop-
13	erty other than property described in
14	clauses $(iii)(I)$ and $(v)(I)$ of subsection
15	(d)(3)(A),
16	"(iv) combined heat and power system
17	property,
18	"(v) low core loss distribution trans-
19	former property,
20	"(vi) qualified anaerobic digester
21	property,
22	"(vii) qualified wind energy systems
23	equipment property, or
24	"(viii) qualified energy star property,

1	"(B)(i) the construction, reconstruction, or
2	erection of which is completed by the taxpayer,
3	or
4	"(ii) which is acquired by the taxpayer if
5	the original use of such property commences
6	with the taxpayer.
7	"(C) which can reasonably be expected to
8	remain in operation for at least 5 years,
9	"(D) with respect to which depreciation (or
10	amortization in lieu of depreciation) is allow-
11	able, and
12	"(E) which meets the performance and
13	quality standards (if any) which—
14	"(i) have been prescribed by the Sec-
15	retary by regulations (after consultation
16	with the Secretary of Energy), and
17	"(ii) are in effect at the time of the
18	acquisition of the property.
19	"(2) Exceptions.—
20	"(A) Public utility property.—Such
21	term shall not include any property which is
22	public utility property (as defined in section
23	46(f)(5) as in effect on the day before the date
24	of the enactment of the Revenue Reconciliation

1	Act of 1990), except for property described in
2	paragraph (1)(A)(iv).
3	"(B) CERTAIN WIND EQUIPMENT.—Such
4	term shall not include equipment described in
5	paragraph (1)(A)(vii) which is taken into ac-
6	count for purposes of section 45 for the taxable
7	year.
8	"(d) Definitions Relating to Types of Energy
9	Property.—For purposes of this section—
10	"(1) Solar energy property.—
11	"(A) IN GENERAL.—The term 'solar en-
12	ergy property' means equipment which uses
13	solar energy to generate electricity, to heat or
14	cool (or provide hot water for use in) a struc-
15	ture, or to provide solar process heat.
16	"(B) SWIMMING POOLS, ETC. USED AS
17	STORAGE MEDIUM.—The term 'solar energy
18	property' shall not include property with respect
19	to which expenditures are properly allocable to
20	a swimming pool, hot tub, or any other energy
21	storage medium which has a function other
22	than the function of such storage.
23	"(C) Solar panels.—No solar panel or
24	other property installed as a roof (or portion
25	thereof) shall fail to be treated as solar energy

property solely because it constitutes a structure on which it is installed.

"(2) Geothermal energy property.—

"(A) IN GENERAL.—The term 'geothermal energy property' means equipment used to produce, distribute, or use energy derived from a geothermal deposit (within the meaning of section 613(e)(2)), but only, in the case of electricity generated by geothermal power, up to (but not including) the electrical transmission stage.

"(B) High risk geothermal well' means a geothermal deposit (within the meaning of section 613(e)(2)) which requires high risk drilling techniques. Such deposit may not be located in a State or national park or in an area in which the relevant State park authority or the National Park Service determines the development of such a deposit will negatively impact on a State or national park.

"(3) Energy-efficient building property.—

1	"(A) IN GENERAL.—The term 'energy-effi-
2	cient building property' means—
3	"(i) a fuel cell which—
4	"(I) generates electricity using
5	an electrochemical process,
6	"(II) has an electricity-only gen-
7	eration efficiency greater than 30 per-
8	cent, and
9	"(III) has a minimum generating
10	capacity of 2 kilowatts,
11	"(ii) an electric heat pump hot water
12	heater which yields an energy factor of 1.7
13	or greater under test procedures prescribed
14	by the Secretary of Energy,
15	"(iii)(I) an electric heat pump which
16	has a heating system performance factor
17	(HSPF) of at least 8.5 but less than 9 and
18	a cooling seasonal energy efficiency ratio
19	(SEER) of at least 13.5 but less than 15,
20	"(II) an electric heat pump which has
21	a heating system performance factor
22	(HSPF) of 9 or greater and a cooling sea-
23	sonal energy efficiency ratio (SEER) of 15
24	or greater,

1	"(iv) a natural gas heat pump which
2	has a coefficient of performance of not less
3	than 1.25 for heating and not less than
4	0.70 for cooling,
5	"(v)(I) a central air conditioner which
6	has a cooling seasonal energy efficiency
7	ratio (SEER) of at least 13.5 but less than
8	15,
9	"(II) a central air conditioner which
10	has a cooling seasonal energy efficiency
11	ratio (SEER) of 15 or greater,
12	"(vi) an advanced natural gas water
13	heater which—
14	"(I) increases steady state effi-
15	ciency and reduces standby and vent
16	losses, and
17	"(II) has an energy factor of at
18	least 0.65,
19	"(vii) an advanced natural gas fur-
20	nace which achieves a 90 percent AFUE
21	and rated for seasonal electricity use of
22	less than 300 kWh per year, and
23	"(viii) natural gas cooling equipment
24	which meets all applicable standards of the
25	American Society of Heating, Refrig-

1	erating, and Air Conditioning Engineers
2	and which—
3	"(I) has a coefficient of perform-
4	ance of not less than .60, or
5	"(II) uses desiccant technology
6	and has an efficiency rating of not
7	less than 50 percent.
8	"(B) Limitations.—The credit under sub-
9	section (a) for the taxable year may not
10	exceed—
11	"(i) \$500 in the case of property de-
12	scribed in subparagraph (A) other than
13	clauses (i), (iv), and (viii) thereof,
14	"(ii) \$1,000 for each kilowatt of ca-
15	pacity in the case of any fuel cell described
16	in subparagraph (A)(i),
17	"(iii) \$1,000 in the case of any nat-
18	ural gas heat pump described in subpara-
19	graph (A)(iv), and
20	"(iv) \$150 for each ton of capacity in
21	the case of any natural gas cooling equip-
22	ment described in subparagraph (A)(viii).
23	"(4) Combined Heat and Power System
24	PROPERTY.—

1	"(A) In General.—The term combined
2	heat and power system property' means
3	property—
4	"(i) comprising a system for the same
5	energy source for the simultaneous or se-
6	quential generation of electrical power, me-
7	chanical shaft power, or both, in combina-
8	tion with steam, heat, or other forms of
9	useful energy,
10	"(ii) which has an electrical capacity
11	of more than 50 kilowatts or a mechanical
12	energy capacity of more than 67 horse-
13	power or an equivalent combination of elec-
14	trical and mechanical energy capacities,
15	"(iii) which produces—
16	"(I) at least 20 percent of its
17	total useful energy in the form of
18	thermal energy, and
19	"(II) at least 20 percent of its
20	total useful energy in the form of elec-
21	trical or mechanical power (or a com-
22	bination thereof), and
23	"(iv) the energy efficiency percentage
24	of which exceeds—

1	"(I) 60 percent in the case of a
2	system with an electrical capacity of
3	less than 1 megawatt),
4	"(II) 65 percent in the case of a
5	system with an electrical capacity of
6	not less than 1 megawatt and not in
7	excess of 50 megawatts), and
8	"(III) 70 percent in the case of a
9	system with an electrical capacity in
10	excess of 50 megawatts).
11	"(B) Special rules.—
12	"(i) Energy efficiency percent-
13	AGE.—For purposes of subparagraph
14	(A)(iv), the energy efficiency percentage of
15	a system is the fraction—
16	"(I) the numerator of which is
17	the total useful electrical, thermal,
18	and mechanical power produced by
19	the system at normal operating rates,
20	and
21	"(II) the denominator of which is
22	the lower heating value of the primary
23	fuel source for the system.
24	"(ii) Determinations made on btu
25	BASIS.—The energy efficiency percentage

1	and the percentages under subparagraph
2	(A)(iii) shall be determined on a Btu basis.
3	"(iii) Input and output property
4	NOT INCLUDED.—The term 'combined heat
5	and power system property' does not in-
6	clude property used to transport the en-
7	ergy source to the facility or to distribute
8	energy produced by the facility.
9	"(iv) Accounting rule for public
10	UTILITY PROPERTY.—If the combined heat
11	and power system property is public utility
12	property (as defined in section $46(f)(5)$ as
13	in effect on the day before the date of the
14	enactment of the Revenue Reconciliation
15	Act of 1990), the taxpayer may only claim
16	the credit under subsection $(a)(1)$ if, with
17	respect to such property, the taxpayer uses
18	a normalization method of accounting.
19	"(5) Low core loss distribution trans-
20	FORMER PROPERTY.—The term 'low core loss dis-
21	tribution transformer property' means a distribution
22	transformer which has energy savings from a highly
23	efficient core of at least 20 percent more than the

average for power ratings reported by studies re-

1	quired under section 124 of the Energy Policy Act
2	of 1992.
3	"(6) Qualified anaerobic digester prop-
4	ERTY.—The term 'qualified anaerobic digester prop-
5	erty' means an anaerobic digester for manure or
6	crop waste which achieves at least 65 percent effi-
7	ciency measured in terms of the fraction of energy
8	input converted to electricity and useful thermal en-
9	ergy.
10	"(7) Qualified wind energy systems
11	EQUIPMENT PROPERTY.—The term 'qualified wind
12	energy systems equipment property' means wind en-
13	ergy systems equipment with a turbine size of not
14	more than 75 kilowatts rated capacity.
15	"(8) Qualified energy star property.—
16	"(A) IN GENERAL.—The term 'qualified
17	energy star product' means a product which—
18	"(i) meets the guidelines, specifica-
19	tions, and performance levels of the En-
20	ergy Star program jointly managed by the
21	Environmental Protection Agency and the
22	Department of Energy, and
23	"(ii) displays the Energy Star label.
24	"(B) Small employer.—The term 'small
25	employer' means, with respect to any calendar

1	year, any employer if such employer employed
2	an average of 100 or fewer employees on busi-
3	ness days during either of the 2 preceding cal-
4	endar years. For purposes of the preceding sen-
5	tence, a preceding calendar year may be taken
6	into account only if the employer was in exist-
7	ence throughout such year.
8	"(e) Special Rules.—For purposes of this
9	section—
10	"(1) Special rule for property financed
11	BY SUBSIDIZED ENERGY FINANCING OR INDUSTRIAL
12	DEVELOPMENT BONDS.—
13	"(A) REDUCTION OF BASIS.—For purposes
14	of applying the energy percentage to any prop-
15	erty, if such property is financed in whole or in
16	part by—
17	"(i) subsidized energy financing, or
18	"(ii) the proceeds of a private activity
19	bond (within the meaning of section 141)
20	the interest on which is exempt from tax
21	under section 103, the amount taken into
22	account as the basis of such property shall
23	not exceed the amount which (but for this
24	subparagraph) would be so taken into ac-

1	count multiplied by the fraction deter-
2	mined under subparagraph (B).
3	"(B) Determination of fraction.—For
4	purposes of subparagraph (A), the fraction de-
5	termined under this subparagraph is 1 reduced
6	by a fraction—
7	"(i) the numerator of which is that
8	portion of the basis of the property which
9	is allocable to such financing or proceeds,
10	and
11	"(ii) the denominator of which is the
12	basis of the property.
13	"(C) Subsidized energy financing.—
14	For purposes of subparagraph (A), the term
15	'subsidized energy financing' means financing
16	provided under a Federal, State, or local pro-
17	gram a principal purpose of which is to provide
18	subsidized financing for projects designed to
19	conserve or produce energy.
20	"(2) Certain progress expenditure rules
21	MADE APPLICABLE.—Rules similar to the rules of
22	subsections (c)(4) and (d) of section 46 (as in effect
23	on the day before the date of the enactment of the
24	Revenue Reconciliation Act of 1990) shall apply for
25	purposes of this section.

1	"(f) Application of Section.—
2	"(1) In general.—Except as provided by
3	paragraph (2), this section shall apply to property
4	placed in service after December 31, 2001, and be-
5	fore January 1, 2009.
6	"(2) Exceptions.—
7	"(A) Solar energy and geothermal
8	ENERGY PROPERTY.—Paragraph (1) shall not
9	apply to solar energy property or geothermal
10	energy property.
11	"(B) CERTAIN ELECTRIC HEAT PUMPS
12	AND CENTRAL AIR CONDITIONERS.—In the case
13	of property which is described in subsection
14	(d)(3)(A)(iii)(I) or $(d)(3)(A)(v)(I)$, this section
15	shall apply to property placed in service after
16	December 31, 2001, and before January 1,
17	2006.
18	"(g) Termination.—This section shall not apply to
19	property placed in service after December 31, 2006.".
20	(b) Conforming Amendments.—
21	(1) Section 48 is amended to read as follows:
22	"SEC. 48. REFORESTATION CREDIT.
23	"(a) In General.—For purposes of section 46, the
24	reforestation credit for any taxable year is 20 percent of
25	the portion of the amortizable basis of any qualified timber

- 1 property which was acquired during such taxable year and
- 2 which is taken into account under section 194 (after the
- 3 application of section 194(b)(1).
- 4 "(b) Definitions.—For purposes of this subpart,
- 5 the terms 'amortizable basis' and 'qualified timber prop-
- 6 erty' have the respective meanings given to such terms by
- 7 section 194.".
- 8 (2) Section 39(d) is amended by adding at the
- 9 end the following:
- 10 "(11) NO CARRYBACK OF ENERGY CREDIT BE-
- 11 FORE EFFECTIVE DATE.—No portion of the unused
- business credit for any taxable year which is attrib-
- 13 utable to the energy credit determined under section
- 14 48A may be carried back to a taxable year ending
- 15 before January 1, 2002.".
- 16 (3) Section 280C is amended by adding at the
- end the following:
- 18 "(d) Credit for Energy Property Expenses.—
- "(1) IN GENERAL.—No deduction shall be al-
- lowed for that portion of the expenses for energy
- property (as defined in section 48A(c)) otherwise al-
- lowable as a deduction for the taxable year which is
- equal to the amount of the credit determined for
- such taxable year under section 48A(a).

1	"(2) Similar rule where taxpayer cap-
2	ITALIZES RATHER THAN DEDUCTS EXPENSES.—If—
3	"(A) the amount of the credit allowable for
4	the taxable year under section 48A (determined
5	without regard to section 38(c)), exceeds
6	"(B) the amount allowable as a deduction
7	for the taxable year for expenses for energy
8	property (determined without regard to para-
9	graph (1)), the amount chargeable to capital
10	account for the taxable year for such expenses
11	shall be reduced by the amount of such excess.
12	"(3) Controlled Groups.—Paragraph (3) of
13	subsection (b) shall apply for purposes of this sub-
14	section.".
15	(4) Section 29(b)(3)(A)(i)(III) is amended by
16	striking 'section 48(a)(4)(C)' and inserting 'section
17	48A(e)(1)(C)'.
18	(5) Section 50(a)(2)(E) is amended by striking
19	'section 48(a)(5)' and inserting 'section 48A(e)(2)'.
20	(6) Section 168(e)(3)(B) is amended—
21	(A) by striking clause (vi)(I) and inserting
22	the following:
23	"(I) is described in paragraph (1) or
24	(2) of section 48A(d) (or would be so de-

- 1 scribed if 'solar and wind' were substituted
- 2 for 'solar' in paragraph (1)(B)),", and
- 3 (B) in the last sentence by striking "sec-
- 4 tion 48(a)(3)" and inserting "section
- 48A(c)(2)(A)".
- 6 (c) Clerical Amendment.—The table of sections
- 7 for subpart E of part IV of subchapter A of chapter 1
- 8 is amended by striking the item relating to section 48 and
- 9 inserting the following:

- 10 (d) Effective Date.—The amendments made by
- 11 this section shall apply to property placed in service after
- 12 December 31, 2001, under rules similar to the rules of
- 13 section 48(m) of the Internal Revenue Code of 1986 (as
- 14 in effect on the day before the date of the enactment of
- 15 the Revenue Reconciliation Act of 1990).
- 16 SEC. 502. ENERGY-EFFICIENT COMMERCIAL BUILDING
- 17 **PROPERTY DEDUCTION.**
- 18 (a) In General.—Part VI of subchapter B of chap-
- 19 ter 1 (relating to itemized deductions for individuals and
- 20 corporations) is amended by adding at the end the fol-
- 21 lowing:

[&]quot;Sec. 48. Reforestation credit.

[&]quot;Sec. 48A. Energy credit.".

1	"SEC. 199. ENERGY-EFFICIENT COMMERCIAL BUILDING
2	PROPERTY.
3	"(a) In General.—There shall be allowed as a de-
4	duction for the taxable year an amount equal to the en-
5	ergy-efficient commercial building property expenditures
6	made by a taxpayer for the taxable year.
7	"(b) Maximum Amount of Deduction.—The
8	amount of energy-efficient commercial building property
9	expenditures taken into account under subsection (a) shall
10	not exceed an amount equal to the product of—
11	"(1) \$2.25, and
12	"(2) the square footage of the building with re-
13	spect to which the expenditures are made.
14	"(c) Year Deduction Allowed.—The deduction
15	under subsection (a) shall be allowed in the taxable year
16	in which the construction of the building is completed.
17	"(d) Energy-Efficient Commercial Building
18	PROPERTY EXPENDITURES.—For purposes of this
19	section—
20	"(1) In general.—The term 'energy-efficient
21	commercial building property expenditures' means
22	an amount paid or incurred for energy-efficient com-
23	mercial building property installed on or in connec-
24	tion with new construction or reconstruction of
25	property—

1	"(A) for which depreciation is allowable
2	under section 167,
3	"(B) which is located in the United States,
4	and
5	"(C) the construction or erection of which
6	is completed by the taxpayer.
7	Such property includes all residential rental prop-
8	erty, including low-rise multifamily structures and
9	single family housing property which is not within
10	the scope of Standard 90.1–1999 (described in para-
11	graph (3)).
12	"(2) Labor costs included.—Such term in-
13	cludes expenditures for labor costs properly allocable
14	to the onsite preparation, assembly, or original in-
15	stallation of the property.
16	"(3) Energy expenditures excluded.—
17	Such term does not include any expenditures taken
18	into account in determining any credit allowed under
19	section 48A.
20	"(e) Energy-Efficient Commercial Building
21	Property.—For purposes of subsection (d)—
22	"(1) In general.—The term 'energy-efficient
23	commercial building property' means any property
24	which reduces total annual energy and power costs
25	with respect to the lighting, heating, cooling, ventila-

- tion, and hot water supply systems of the building by 50 percent or more in comparison to a reference building which meets the requirements of Standard 90.1–1999 of the American Society of Heating, Re-frigerating, and Air Conditioning Engineers and the Illuminating Engineering Society of North America using methods of calculation under subparagraph (B) and certified by qualified professionals as pro-vided under paragraph (6).
 - "(2) METHODS OF CALCULATION.—The Secretary, in consultation with the Secretary of Energy, shall promulgate regulations which describe in detail methods for calculating and verifying energy and power consumption and cost, taking into consideration the provisions of the 1998 California Nonresidential ACM Manual. These procedures shall meet the following requirements:
 - "(A) In calculating tradeoffs and energy performance, the regulations shall prescribe the costs per unit of energy and power, such as kilowatt hour, kilowatt, gallon of fuel oil, and cubic foot or Btu of natural gas, which may be dependent on time of usage.
 - "(B) The calculational methodology shall require that compliance be demonstrated for a

1 whole building. If some systems of the building, 2 such as lighting, are designed later than other 3 systems of the building, the method shall pro-4 vide that either— "(i) the expenses taken into account 6 under paragraph (1) shall not occur until the date designs for all energy-using sys-7 8 tems of the building are completed, or 9 "(ii) the expenses taken into account 10 under paragraph (1) shall be a fraction of 11 such expenses based on the performance of 12 less than all energy-using systems in ac-13 cordance with subparagraph (C), and the 14 energy performance of all systems and 15 components not yet designed shall be as-16 sumed to comply minimally with the re-17 quirements of such Standard 90.1–1999. 18 "(C) The expenditures in connection with 19 the design of subsystems in the building, such 20 as the envelope, the heating, ventilation, air 21 conditioning and water heating system, and the 22 lighting system shall be allocated to the appro-23 priate building subsystem based on system-spe-

cific energy cost savings targets in regulations

promulgated by the Secretary of Energy which

24

1	are equivalent, using the calculation method-
2	ology, to the whole building requirement of 50
3	percent savings.
4	"(D) The calculational methods under this
5	paragraph need not comply fully with section
6	11 of such Standard 90.1–1999.
7	"(E) The calculational methods shall be
8	fuel neutral, such that the same energy effi-
9	ciency features shall qualify a building for the
10	deduction under this section regardless of
11	whether the heating source is a gas or oil fur-
12	nace or an electric heat pump.
13	"(F) The calculational methods shall pro-
14	vide appropriate calculated energy savings for
15	design methods and technologies not otherwise
16	credited in either such Standard 90.1–1999 or
17	in the 1998 California Nonresidential ACM
18	Manual, including the following:
19	"(i) Natural ventilation.
20	"(ii) Evaporative cooling.
21	"(iii) Automatic lighting controls such
22	as occupancy sensors, photocells, and time-
23	clocks.
24	"(iv) Daylighting.

1	"(v) Designs utilizing semi-condi-
2	tioned spaces which maintain adequate
3	comfort conditions without air conditioning
4	or without heating.
5	"(vi) Improved fan system efficiency,
6	including reductions in static pressure.
7	"(vii) Advanced unloading mecha-
8	nisms for mechanical cooling, such as mul-
9	tiple or variable speed compressors.
10	"(viii) The calculational methods may
11	take into account the extent of commis-
12	sioning in the building, and allow the tax-
13	payer to take into account measured per-
14	formance which exceeds typical perform-
15	ance.
16	"(3) Computer Software.—
17	"(A) IN GENERAL.—Any calculation under
18	this subsection shall be prepared by qualified
19	computer software.
20	"(B) Qualified computer software.—
21	For purposes of this paragraph, the term
22	'qualified computer software' means software—
23	"(i) for which the software designer
24	has certified that the software meets all
25	procedures and detailed methods for calcu-

1	lating energy and power consumption and
2	costs as required by the Secretary,
3	"(ii) which provides such forms as re-
4	quired to be filed by the Secretary in con-
5	nection with energy efficiency of property
6	and the deduction allowed under this sec-
7	tion, and
8	"(iii) which provides a notice form
9	which summarizes the energy efficiency
10	features of the building and its projected
11	annual energy costs.
12	"(4) Allocation of Deduction for Public
13	PROPERTY.—In the case of energy-efficient commer-
14	cial building property installed on or in public prop-
15	erty, the Secretary shall promulgate a regulation to
16	allow the allocation of the deduction to the person
17	primarily responsible for designing the property in
18	lieu of the public entity which is the owner of such
19	property. Such person shall be treated as the tax-
20	payer for purposes of this section.
21	"(5) Notice to owner.—The qualified indi-
22	vidual shall provide an explanation to the owner of
23	the building regarding the energy efficiency features

of the building and its projected annual energy costs

1	as provided in the notice under paragraph
2	(3)(B)(iii).
3	"(6) Certification.—
4	"(A) IN GENERAL.—Except as provided in
5	this paragraph, the Secretary, in consultation
6	with the Secretary of Energy, shall establish re-
7	quirements for certification and compliance pro-
8	cedures similar to the procedures under section
9	45G(d).
10	"(B) QUALIFIED INDIVIDUALS.—Individ-
11	uals qualified to determine compliance shall be
12	only those individuals who are recognized by an
13	organization certified by the Secretary for such
14	purposes.
15	"(C) Proficiency of qualified individ-
16	UALS.—The Secretary shall consult with non-
17	profit organizations and State agencies with ex-
18	pertise in energy efficiency calculations and in-
19	spections to develop proficiency tests and train-
20	ing programs to qualify individuals to determine
21	compliance.
22	"(f) TERMINATION.—This section shall not apply
23	with respect to any energy-efficient commercial building
24	property expenditures in connection with property—

- 1 "(1) the plans for which are not certified under
- 2 subsection (e)(6) on or before December 31, 2006,
- 3 and
- 4 "(2) the construction of which is not completed
- on or before December 31, 2008.".
- 6 (b) Conforming Amendments.—Section 1016(a) is
- 7 amended by striking "and" at the end of paragraph (27),
- 8 by striking the period at the end of paragraph (28) and
- 9 inserting ", and", and by inserting the following:
- 10 "(29) for amounts allowed as a deduction under
- 11 section 199(a).".
- 12 (c) Clerical Amendment.—The table of sections
- 13 for part VI of subchapter B of chapter 1 is amended by
- 14 adding at the end the following:
 - "Sec. 199. Energy-efficient commercial building property.".
- 15 (d) Effective Date.—The amendments made by
- 16 this section shall apply to taxable years beginning after
- 17 December 31, 2001.
- 18 SEC. 503. BUSINESS TAX CREDIT FOR THE MANUFACTURE
- 19 OF ENERGY EFFICIENT APPLIANCES.
- 20 (a) IN GENERAL.—Subpart D of part IV of sub-
- 21 chapter A of chapter 1 (relating to business-related cred-
- 22 its) is amended by adding at the end the following new
- 23 section:

1 "SEC. 45G. ENERGY EFFICIENT APPLIANCE CREDIT.

2	"(a) General Rule.—For purposes of section 38,
3	the energy efficient appliance credit determined under this
4	section for the taxable year is an amount equal to the ap-
5	plicable amount determined under subsection (b) with re-
6	spect to qualified energy efficient appliances produced by
7	the taxpayer during the calendar year ending with or with-
8	in the taxable year.
9	"(b) APPLICABLE AMOUNT.—For purposes of sub-
10	section (a), the applicable amount determined under this
11	subsection with respect to a taxpayer is the sum of—
12	"(1) in the case of an energy efficient clothes
13	washer described in subsection (d)(2)(A), an energy
14	efficient refrigerator described in subsection
15	(d)(3)(B)(i), or an energy efficient air conditioner
16	described in subsection (d)(4)(A), an amount equal
17	to—
18	"(A) \$50, multiplied by
19	"(B) the number of such washers, refrig-
20	erators, and air conditioners produced by the
21	taxpayer during such calendar year, and
22	"(2) in the case of an energy efficient clothes
23	washer described in subsection (d)(2)(B), an energy
24	efficient refrigerator described in subsection
25	(d)(3)(B)(ii), or an energy efficient air conditioner

1	described in subsection $(d)(4)(B)$, an amount equal
2	to—
3	"(A) \$100, multiplied by
4	"(B) the number of such washers, refrig-
5	erators, or air conditioners produced by the tax-
6	payer during such calendar year.
7	"(c) Limitation on Maximum Credit.—
8	"(1) In general.—The maximum amount of
9	credit allowed under subsection (a) with respect to
10	a taxpayer for all taxable years shall be—
11	"(A) \$30,000,000 with respect to the cred-
12	it determined under subsection (b)(1), and
13	"(B) \$30,000,000 with respect to the cred-
14	it determined under subsection (b)(2).
15	"(2) Limitation based on gross re-
16	CEIPTS.—The credit allowed under subsection (a)
17	with respect to a taxpayer for the taxable year shall
18	not exceed an amount equal to 2 percent of the aver-
19	age annual gross receipts of the taxpayer for the 3
20	taxable years preceding the taxable year in which
21	the credit is determined.
22	"(3) Gross receipts.—For purposes of this
23	subsection, the rules of paragraphs (2) and (3) of
24	section 448(c) shall apply.

1	"(d) Qualified Energy Efficient Appliance.—
2	For purposes of this section—
3	"(1) In general.—The term 'qualified energy
4	efficient appliance' means—
5	"(A) an energy efficient clothes washer,
6	"(B) an energy efficient refrigerator, or
7	"(C) an energy efficient air conditioner.
8	"(2) Energy efficient clothes washer.—
9	The term 'energy efficient clothes washer' means a
10	residential clothes washer, including a residential
11	style coin operated washer, which is manufactured
12	with—
13	"(A) a 1.26 Modified Energy Factor (re-
14	ferred to in this paragraph as 'MEF') (as de-
15	termined by the Secretary of Energy), or
16	"(B) a 1.42 MEF (as determined by the
17	Secretary of Energy) (1.5 MEF for calendar
18	years beginning after 2004).
19	"(3) Energy efficient refrigerator.—The
20	term 'energy efficient refrigerator' means an auto-
21	matic defrost refrigerator-freezer which—
22	"(A) has an internal volume of at least
23	16.5 cubic feet, and
24	"(B) consumes—

1	"(i) 10 percent less kw/hr/yr than the
2	energy conservation standards promulgated
3	by the Department of Energy for such re-
4	frigerator for 2001, or
5	"(ii) 15 percent less kw/hr/yr than
6	such energy conservation standards.
7	"(4) Energy efficient air conditioner.—
8	The term 'energy efficient air conditioner' means—
9	"(A) a central air conditioner which has a
10	cooling seasonal energy efficiency ratio (SEER)
11	of at least 13.5 but less than 15, or
12	"(B) a central air conditioner which has a
13	cooling seasonal energy efficiency ratio (SEER)
14	of 15 or greater.
15	"(e) Special Rules.—
16	"(1) In general.—Rules similar to the rules
17	of subsections (c), (d), and (e) of section 52 shall
18	apply for purposes of this section.
19	"(2) AGGREGATION RULES.—All persons treat-
20	ed as a single employer under subsection (a) or (b)
21	of section 52 or subsection (m) or (o) of section 414
22	shall be treated as one person for purposes of sub-
23	section (a).
24	"(f) Verification.—The taxpayer shall submit such
25	information or certification as the Secretary, in consulta-

- 1 tion with the Secretary of Energy, determines necessary
- 2 to claim the credit amount under subsection (a).
- 3 "(g) Termination.—This section shall not apply—
- 4 "(1) with respect to energy efficient refrig-
- 5 erators described in subsection (d)(3)(B)(i) produced
- 6 in calendar years beginning after 2005, and
- 7 "(2) with respect to all other qualified energy
- 8 efficient appliances produced in calendar years be-
- 9 ginning after 2007.".
- 10 (b) Limitation on Carryback.—Section 39(d) (re-
- 11 lating to transition rules) is amended by adding at the
- 12 end the following new paragraph:
- 13 "(12) No carryback of energy efficient
- 14 APPLIANCE CREDIT BEFORE EFFECTIVE DATE.—No
- portion of the unused business credit for any taxable
- year which is attributable to the energy efficient ap-
- 17 pliance credit determined under section 45G may be
- carried to a taxable year ending before the date of
- the enactment of section 45G.".
- 20 (c) Conforming Amendment.—Section 38(b) (re-
- 21 lating to general business credit) is amended by striking
- 22 "plus" at the end of paragraph (14), by striking the period
- 23 at the end of paragraph (15) and inserting ", plus", and
- 24 by adding at the end the following new paragraph:

1	"(16) the energy efficient appliance credit de-
2	termined under section 45G(a).".
3	(d) Clerical Amendment.—The table of sections
4	for subpart D of part IV of subchapter A of chapter 1
5	is amended by inserting after the item relating to section
6	45F the following new item:
	"Sec. 45G. Energy efficient appliance credit.".
7	(e) Effective Date.—The amendments made by
8	this section shall apply to taxable years beginning after
9	December 31, 2001.
10	Subtitle B—Residential Energy
11	Systems
12	SEC. 511. CREDIT FOR CONSTRUCTION OF NEW ENERGY-EF-
13	FICIENT HOME.
14	(a) In General.—Subpart D of part IV of sub-
15	chapter A of chapter 1 (relating to business related cred-
16	its) is amended by inserting after section 45G the fol-
17	lowing:
18	"SEC. 45H. NEW ENERGY-EFFICIENT HOME CREDIT.
19	"(a) In General.—For purposes of section 38, in
20	the case of an eligible contractor, the credit determined
21	under this section for the taxable year is an amount equal
22	to the aggregate adjusted bases of all energy-efficient

property installed in a qualified new energy-efficient home

25 "(b) Limitations.—

during construction of such home.

1	"(1) Maximum credit.—
2	"(A) In general.—The credit allowed by
3	this section with respect to a dwelling shall not
4	exceed—
5	"(i) in the case of a dwelling described
6	in subsection $(c)(3)(D)(i)$, \$2,000, and
7	"(ii) in the case of a dwelling de-
8	scribed in subsection (c)(3)(D)(ii), \$3,000.
9	"(B) Prior credit amounts on same
10	DWELLING TAKEN INTO ACCOUNT.—If a credit
11	was allowed under subsection (a) with respect
12	to a dwelling in 1 or more prior taxable years,
13	the amount of the credit otherwise allowable for
14	the taxable year with respect to that dwelling
15	shall not exceed the amount under clause (i) or
16	(ii) (as the case may be), reduced by the sum
17	of the credits allowed under subsection (a) with
18	respect to the dwelling for all prior taxable
19	years.
20	"(C) Adjustment for inflation.—
21	"(i) In general.—In the case of any
22	taxable year beginning in a calendar year
23	after 2002, each dollar amount contained
24	in subparagraph (A) shall be increased by
25	an amount equal to—

1	"(I) such dollar amount, multi-
2	plied by
3	"(II) the cost-of-living adjust-
4	ment determined under section 1(f)(3)
5	for the calendar year in which the tax-
6	able year begins by substituting 'cal-
7	endar year 2001' for 'calendar year
8	1992' in subparagraph (B) thereof.
9	"(B) ROUNDING.—If any increase deter-
10	mined under paragraph (1) is not a multiple of
11	\$100, such increase shall be rounded to the
12	next lower multiple of \$100.
13	"(2) Coordination with rehabilitation
14	AND ENERGY CREDITS.—For purposes of this
15	section—
16	"(A) the basis of any property referred to
17	in subsection (a) shall be reduced by that por-
18	tion of the basis of any property which is attrib-
19	utable to qualified rehabilitation expenditures
20	(as defined in section $47(c)(2)$) or to the energy
21	percentage of energy property (as determined
22	under section 48A(a)), and
23	"(B) expenditures taken into account
24	under either section 47 or 48A(a) shall not be
25	taken into account under this section.

1	"(c) Definitions.—For purposes of this section—
2	"(1) Eligible contractor.—The term 'eligi-
3	ble contractor' means the person who constructed
4	the new energy-efficient home, or in the case of a
5	manufactured home which conforms to Federal
6	Manufactured Home Construction and Safety Stand-
7	ards (24 C.F.R. 3280), the manufactured home pro-
8	ducer of such home.
9	"(2) Energy-efficient property.—The
10	term 'energy-efficient property' means any energy-
11	efficient building envelope component, and any en-
12	ergy-efficient heating or cooling equipment which
13	can, individually or in combination with other com-
14	ponents, meet the requirements of this section.
15	"(3) Qualified new energy-efficient
16	HOME.—The term 'qualified new energy-efficient
17	home' means a dwelling—
18	"(A) located in the United States,
19	"(B) the construction of which is substan-
20	tially completed after December 31, 2000,
21	"(C) the original use of which is as a prin-
22	cipal residence (within the meaning of section
23	121) which commences with the person who ac-
24	quires such dwelling from the eligible con-
25	tractor, and

1	"(D) which is certified to have a projected
2	level of annual heating and cooling energy con-
3	sumption, measured in terms of average annual
4	energy cost to the homeowner which is at
5	least—
6	"(i) 30 percent less than the annual
7	level of heating and cooling energy con-
8	sumption of a reference dwelling con-
9	structed in accordance with the standards
10	of chapter 4 of the 2000 International En-
11	ergy Conservation Code, or
12	"(ii) 50 percent less than such annual
13	level of heating and cooling energy con-
14	sumption.
15	"(4) Construction.—The term 'construction'
16	includes reconstruction and rehabilitation.
17	"(5) Acquire.—The term 'acquire' includes
18	purchase and, in the case of reconstruction and re-
19	habilitation, such term includes a binding written
20	contract for such reconstruction or rehabilitation.
21	"(6) Building envelope component.—The
22	term 'building envelope component' means—
23	"(A) insulation material or system which is
24	specifically and primarily designed to reduce the

1	heat loss or gain of a dwelling when installed in
2	or on such dwelling, and
3	"(B) exterior windows (including skylights)
4	and doors.
5	"(7) Manufactured Home included.—The
6	term 'dwelling' includes a manufactured home con-
7	forming to Federal Manufactured Home Construc-
8	tion and Safety Standards (24 C.F.R. 3280).
9	"(d) Certification.—
10	"(1) Method.—A certification described in
11	subsection (c)(3)(D) shall be determined on the
12	basis of 1 of the following methods:
13	"(A) A component-based method, using the
14	applicable technical energy efficiency specifica-
15	tions or ratings (including product labeling re-
16	quirements) for the energy-efficient building en-
17	velope component or energy-efficient heating or
18	cooling equipment. The Secretary shall, in con-
19	sultation with the Administrator of the Envi-
20	ronmental Protection Agency, develop prescrip-
21	tive component-based packages that are equiva-
22	lent in energy performance to properties that
23	qualify under subparagraph (B).
24	"(B) An energy performance-based method
25	that calculates projected energy usage and cost

1	reductions in the dwelling in relation to a ref-
2	erence dwelling—
3	"(i) heated by the same energy source
4	and heating system type, and
5	"(ii) constructed in accordance with
6	the standards of chapter 4 of the 2000
7	International Energy Conservation Code.
8	Computer software shall be used in support of an
9	energy performance-based method certification under
10	subparagraph (B). Such software shall meet proce-
11	dures and methods for calculating energy and cost
12	savings in regulations promulgated by the Secretary
13	of Energy. Such regulations on the specifications for
14	software and verification protocols shall be based on
15	the 1998 California Residential Alternative Calcula-
16	tion Method Approval Manual.
17	"(2) Provider.—Such certification shall be
18	provided by—
19	"(A) in the case of a method described in
20	paragraph (1)(A), a local building regulatory
21	authority, a utility, a manufactured home pro-
22	duction inspection primary inspection agency
23	(IPIA), or a home energy rating organization,
24	or

"(B) in the case of a method described in paragraph (1)(B), an individual recognized by an organization designated by the Secretary for such purposes.

"(3) FORM.—

"(A) In GENERAL.—Such certification shall be made in writing in a manner that specifies in readily verifiable fashion the energy-efficient building envelope components and energy-efficient heating or cooling equipment installed and their respective rated energy efficiency performance, and in the case of a method described in paragraph (1)(B), accompanied by written analysis documenting the proper application of a permissible energy performance calculation method to the specific circumstances of such dwelling.

"(B) FORM PROVIDED TO BUYER.—A form documenting the energy-efficient building envelope components and energy-efficient heating or cooling equipment installed and their rated energy efficiency performance shall be provided to the buyer of the dwelling. The form shall include labeled R-value for insulation products, NFRC-labeled U-factor and Solar Heat Gain

Coefficient for windows, skylights, and doors, labeled AFUE ratings for furnaces and boilers, labeled HSPF ratings for electric heat pumps, and labeled SEER ratings for air conditioners.

"(C) RATINGS LABEL AFFIXED IN DWELL-ING.—A permanent label documenting the ratings in subparagraph (B) shall be affixed to the front of the electrical distribution panel of the dwelling, or shall be otherwise permanently displayed in a readily inspectable location in the dwelling.

"(4) REGULATIONS.—

"(A) IN GENERAL.—In prescribing regulations under this subsection for energy performance-based certification methods, the Secretary, after examining the requirements for energy consultants and home energy ratings providers specified by the Mortgage Industry National Accreditation Procedures for Home Energy Rating Systems, shall prescribe procedures for calculating annual energy usage and cost reductions for heating and cooling and for the reporting of the results. Such regulations shall—

"(i) provide that any calculation procedures be fuel neutral such that the same

1 energy efficiency measures allow a home to 2 qualify for the credit under this section re-3 gardless of whether the dwelling uses a gas or oil furnace or boiler or an electric heat pump, and 6 "(ii) require that any computer soft-7 ware allow for the printing of the Federal 8 tax forms necessary for the credit under 9 this section and for the printing of forms 10 for disclosure to the homebuyer. 11 "(B) Providers.—For purposes of para-12 graph (2)(B), the Secretary shall establish re-13 quirements for the designation of individuals 14 based on the requirements for energy consult-15 ants and home energy raters specified by the 16 Mortgage Industry National Accreditation Pro-17 cedures for Home Energy Rating Systems. 18 "(e) Basis Adjustment.—For purposes of this subtitle, if a credit is allowed under this section for any ex-19 penditure with respect to any property, the increase in the 21 basis of such property which would (but for this subsection) result from such expenditure shall be reduced by 23 the amount of the credit so allowed.". 24 (b) Credit Made Part of General Business

CREDIT.—Subsection (b) of section 38 (relating to current

- 1 year business credit) is amended by striking "plus" at the
- 2 end of paragraph (15), by striking the period at the end
- 3 of paragraph (16) and inserting ", plus", and by adding
- 4 at the end the following:
- 5 "(17) the new energy-efficient home credit de-
- 6 termined under section 45H.".
- 7 (c) Denial of Double Benefit.—Section 280C
- 8 (relating to certain expenses for which credits are allow-
- 9 able) is amended by adding at the end the following:
- 10 (e) New Energy-Efficient Home Expenses.—
- 11 No deduction shall be allowed for that portion of expenses
- 12 for a new energy-efficient home otherwise allowable as a
- 13 deduction for the taxable year which is equal to the
- 14 amount of the credit determined for such taxable year
- 15 under section 45H.".
- 16 (d) Credit Allowed Against Regular and Min-
- 17 IMUM TAX.—
- 18 (1) In general.—Subsection (c) of section 38
- 19 (relating to limitation based on amount of tax) is
- amended by redesignating paragraph (3) as para-
- graph (4) and by inserting after paragraph (2) the
- following new paragraph:
- "(3) Special rules for New Energy effi-
- 24 CIENT HOME CREDIT.—

1	"(A) IN GENERAL.—In the case of the new
2	energy efficient home credit—
3	"(i) this section and section 39 shall
4	be applied separately with respect to the
5	credit, and
6	"(ii) in applying paragraph (1) to the
7	credit—
8	"(I) subparagraphs (A) and (B)
9	thereof shall not apply, and
10	"(II) the limitation under para-
11	graph (1) (as modified by subclause
12	(I)) shall be reduced by the credit al-
13	lowed under subsection (a) for the
14	taxable year (other than the new en-
15	ergy efficient home credit).
16	"(B) New energy efficient home
17	CREDIT.—For purposes of this subsection, the
18	term 'new energy efficient home credit' means
19	the credit allowable under subsection (a) by rea-
20	son of section 45H.
21	"(e) Termination.—This section shall not apply to
22	taxable years beginning after December 31, 2006.".
23	(2) Conforming amendment.—Subclause (II)
24	of section 38(c)(2)(A)(ii) is amended by inserting

- 1 "or the new energy efficient home credit" after "em-
- 2 ployment credit".
- 3 (e) Limitation on Carryback.—Subsection (d) of
- 4 section 39 is amended by adding at the end the following:
- 5 "(13) No carryback of New Energy-effi-
- 6 CIENT HOME CREDIT BEFORE EFFECTIVE DATE.—
- 7 No portion of the unused business credit for any
- 8 taxable year which is attributable to the credit deter-
- 9 mined under section 45H may be carried back to
- any taxable year ending before January 1, 2001.".
- 11 (f) Deduction for Certain Unused Business
- 12 Credits.—Subsection (c) of section 196 is amended by
- 13 striking "and" at the end of paragraph (8), by striking
- 14 the period at the end of paragraph (9) and inserting ",
- 15 and", and by adding after paragraph (10) the following:
- 16 "(11) the new energy-efficient home credit de-
- termined under section 45H.".
- 18 (g) Clerical Amendment.—The table of sections
- 19 for subpart D of part IV of subchapter A of chapter 1
- 20 is amended by inserting after the item relating to section
- 21 45G the following:
 - "Sec. 45H. New energy-efficient home credit.".
- (h) Effective Date.—The amendments made by
- 23 this section shall apply to taxable years ending after De-
- 24 cember 31, 2000.

1	SEC. 512. CREDIT FOR ENERGY EFFICIENCY IMPROVE-
2	MENTS TO EXISTING HOMES.
3	(a) In General.—Subpart A of part IV of sub-
4	chapter A of chapter 1 (relating to nonrefundable personal
5	credits) is amended by inserting after section 25B the fol-
6	lowing new section:
7	"SEC. 25C. ENERGY EFFICIENCY IMPROVEMENTS TO EXIST-
8	ING HOMES.
9	"(a) Allowance of Credit.—In the case of an in-
10	dividual, there shall be allowed as a credit against the tax
11	imposed by this chapter for the taxable year an amount
12	equal to 20 percent of the amount paid or incurred by
13	the taxpayer for qualified energy efficiency improvements
14	installed during such taxable year.
15	"(b) Limitations.—
16	"(1) MAXIMUM CREDIT.—The credit allowed by
17	this section with respect to a dwelling shall not ex-
18	ceed \$2,000.
19	"(2) Prior credit amounts for taxpayer
20	ON SAME DWELLING TAKEN INTO ACCOUNT.—If a
21	credit was allowed to the taxpayer under subsection
22	(a) with respect to a dwelling in 1 or more prior tax-
23	able years, the amount of the credit otherwise allow-
24	able for the taxable year with respect to that dwell-
25	ing shall not exceed the amount of \$2,000 reduced
26	by the sum of the credits allowed under subsection

1	(a) to the taxpayer with respect to the dwelling for
2	all prior taxable years.
3	"(3) Adjustment for inflation.—
4	"(A) IN GENERAL.—In the case of any
5	taxable year beginning in a calendar year after
6	2001, the \$2,000 amount contained in para-
7	graphs (1) and (2) shall each be increased by
8	an amount equal to—
9	"(i) \$2000, multiplied by
10	"(ii) the cost-of-living adjustment de-
11	termined under section 1(f)(3) for the cal-
12	endar year in which the taxable year be-
13	gins by substituting 'calendar year 2000'
14	for 'calendar year 1992' in subparagraph
15	(B) thereof.
16	"(B) ROUNDING.—If any increase deter-
17	mined under subparagraph (A) is not a multiple
18	of \$100, such increase shall be rounded to the
19	next lowest multiple of \$100.".
20	"(c) Carryforward of Unused Credit.—If the
21	credit allowable under subsection (a) exceeds the limita-
22	tion imposed by section 26(a) for such taxable year re-
23	duced by the sum of the credits allowable under this sub-
24	part (other than this section), such excess shall be carried

1	to the succeeding taxable year and added to the credit al-
2	lowable under subsection (a) for such taxable year.
3	"(d) Qualified Energy Efficiency Improve-
4	MENTS.—For purposes of this section, the term 'qualified
5	energy efficiency improvements' means any energy effi-
6	cient building envelope component which is certified to
7	meet or exceed the prescriptive criteria for such compo-
8	nent in the 2000 International Energy Conservation Code
9	or any combination of energy efficiency measures which
10	achieves at least a 30 percent reduction in heating and
11	cooling energy usage for the dwelling (as measured in
12	terms of energy cost to the taxpayer), if—
13	"(1) such component or combinations of meas-
14	ures is installed in or on a dwelling—
15	"(A) located in the United States, and
16	"(B) owned and used by the taxpayer as
17	the taxpayer's principal residence (within the
18	meaning of section 121),
19	"(2) the original use of such component or com-
20	bination of measures commences with the taxpayer
21	and
22	"(3) such component or combination of meas-
23	ures reasonably can be expected to remain in use for
24	at least 5 years.

1	"(e) Certification.—The certification described in
2	subsection (d) shall be—
3	'(1) in the case of any component described in
4	subsection (d), determined on the basis of applicable
5	energy efficiency ratings (including product labeling
6	requirements) for affected building envelope compo-
7	nents,
8	"(2) in the case of combinations of measures
9	described in subsection (d), determined by the per-
10	formance-based methods described in section
11	45G(d),
12	"(3) provided by a third party, such as a local
13	building regulatory authority, a utility, a manufac-
14	tured home production inspection primary inspection
15	agency (IPIA), or a home energy rating organiza-
16	tion, consistent with the requirements of section
17	45G(d)(2), and
18	"(4) made in writing on forms which specify in
19	readily inspectable fashion the energy-efficient com-
20	ponents and other measures and their respective ef-
21	ficiency ratings, and which shall include a perma-
22	nent label affixed to the electrical distribution panel
23	as described in section $45G(d)(3)(C)$.
24	"(f) Definitions and Special Rules.—

"(1) Dollar amounts in case of joint occupancy.—In the case of any dwelling unit which is jointly occupied and used during any calendar year as a residence by 2 or more individuals the following shall apply:

"(A) The amount of the credit allowable under subsection (a) by reason of expenditures for the qualified energy efficiency improvements made during such calendar year by any of such individuals with respect to such dwelling unit shall be determined by treating all of such individuals as 1 taxpayer whose taxable year is such calendar year.

"(B) There shall be allowable with respect to such expenditures to each of such individuals, a credit under subsection (a) for the taxable year in which such calendar year ends in an amount which bears the same ratio to the amount determined under subparagraph (A) as the amount of such expenditures made by such individual during such calendar year bears to the aggregate of such expenditures made by all of such individuals during such calendar year.

"(2) Tenant-stockholder in cooperative housing corporation.—In the case of an indi-

vidual who is a tenant-stockholder (as defined in section 216) in a cooperative housing corporation (as defined in such section), such individual shall be treated as having paid his tenant-stockholder's proportionate share (as defined in section 216(b)(3)) of the cost of qualified energy efficiency improvements made by such corporation.

"(3) Condominiums.—

"(A) IN GENERAL.—In the case of an individual who is a member of a condominium management association with respect to a condominium which he owns, such individual shall be treated as having paid his proportionate share of the cost of qualified energy efficiency improvements made by such association.

"(B) CONDOMINIUM MANAGEMENT ASSO-CIATION.—For purposes of this paragraph, the term 'condominium management association' means an organization which meets the requirements of paragraph (1) of section 528(c) (other than subparagraph (E) thereof) with respect to a condominium project substantially all of the units of which are used as residences.

"(4) Building envelope component' means—

1	"(A) insulation material or system which is
2	specifically and primarily designed to reduce the
3	heat loss or gain or a dwelling when installed
4	in or on such dwelling, and
5	"(B) exterior windows (including skylights)
6	and doors.
7	"(5) Manufactured homes included.—For
8	purposes of this section, the term 'dwelling' includes
9	a manufactured home which conforms to Federal
10	Manufactured Home Construction and Safety Stand-
11	ards (24 C.F.R. 3280).
12	"(g) Basis Adjustment.—For purposes of this sub-
13	title, if a credit is allowed under this section for any ex-
14	penditure with respect to any property, the increase in the
15	basis of such property which would (but for this sub-
16	section) result from such expenditure shall be reduced by
17	the amount of the credit so allowed.
18	"(h) TERMINATION.—This section shall not apply to
19	taxable years beginning after December 31, 2006.".
20	(b) Conforming Amendments.—
21	(1) Subsection (e) of section 23 is amended by
22	striking "and 1400C" and inserting ", 25C, and
23	1400C".
24	(2) Subparagraph (C) of section 25(e)(1) is
25	amended by inserting "25C," after "24,".

1	(3) Section 904(h) is amended by inserting ",
2	25C" after "24".
3	(4) Subsection (d) of section 1400C is amended
4	by striking "section 24" and inserting "sections 24
5	and 25C".
6	(5) Subsection (a) of section 1016 is amended
7	by striking "and" at the end of paragraph (28), by
8	striking the period at the end of paragraph (29) and
9	inserting "; and", and by adding at the end the fol-
10	lowing:
11	"(30) to the extent provided in section 25C(f),
12	in the case of amounts with respect to which a credit
13	has been allowed under section 25C.".
14	(6) The table of sections for subpart A of part
15	IV of subchapter A of chapter 1 is amended by in-
16	serting after the item relating to section 25A the fol-
17	lowing new item:
	"Sec. 25C. Energy efficiency improvements to existing homes.".
18	(c) Effective Date.—The amendments made by
19	this section shall apply to taxable years ending on or after
20	the date of the enactment of this Act.
21	SEC. 513. CREDIT FOR RESIDENTIAL SOLAR, WIND, AND
22	FUEL CELL ENERGY PROPERTY.
23	(a) In General.—Subpart A of part IV of sub-
24	chapter A of chapter 1 (relating to nonrefundable personal

1	credits) is amended by inserting after section 25C the fol-
2	lowing:
3	"SEC. 25D. RESIDENTIAL WIND, AND FUEL CELL ENERGY
4	PROPERTY.
5	"(a) Allowance of Credit.—In the case of an in-
6	dividual, there shall be allowed as a credit against the tax
7	imposed by this chapter for the taxable year an amount
8	equal to the sum of—
9	"(1) 30 percent of the qualified photovoltaic
10	property expenditures,
11	"(2) 30 percent of the qualified wind energy
12	property expenditures, and
13	"(3) 30 percent for the qualified fuel cell prop-
14	erty expenditures,
15	made by the taxpayer during the taxable year.
16	"(b) Limitations.—
17	"(1) Type of property.—No expenditure may
18	be taken into account under this section unless such
19	expenditure is made by the taxpayer for property in-
20	stalled on or in connection with a dwelling unit
21	which is located in the United States and which is
22	used as a residence.
23	"(2) Safety Certifications.—No credit shall
24	be allowed under this section for an item of photo-
25	voltaic, wind energy, or fuel cell property unless such

- property meets appropriate fire and electric code requirements.
- 3 "(c) Definitions.—For purposes of this section—
 - "(1) QUALIFIED PHOTOVOLTAIC PROPERTY EX-PENDITURE.—The term 'qualified photovoltaic property expenditure' means an expenditure for property which uses solar energy to generate electricity for use in a dwelling unit.
 - "(2) Solar panel or other property installed as a roof (or portion thereof) shall fail to be treated as property described in paragraph (1) or (2) solely because it constitutes a structural component of the structure on which it is installed.
 - "(3) QUALIFIED WIND ENERGY PROPERTY EX-PENDITURE.—The term 'qualified wind energy property expenditure' means an expenditure for property which uses wind energy to generate electricity for use in a dwelling unit.
 - "(4) QUALIFIED FUEL CELL PROPERTY EX-PENDITURE.—The term 'qualified fuel cell property expenditure' means an expenditure for property which uses an electrochemical fuel cell system to generate electricity for use in a dwelling unit.

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- "(5) Labor costs.—Expenditures for labor costs properly allocable to the onsite preparation, assembly, or original installation of the property described in paragraph (1), (2), or (4) and for piping or wiring to interconnect such property to the dwelling unit shall be taken into account for purposes of this section.
- 6 "(6) ENERGY STORAGE MEDIUM.—Expenditures which are properly allocable to a swimming pool, hot tub, or any other energy storage medium which has a function other than the function of such storage shall not be taken into account for purposes of this section.
- 14 "(d) Special Rules.—For purposes of this 15 section—
 - "(1) DOLLAR AMOUNTS IN CASE OF JOINT OC-CUPANCY.—In the case of any dwelling unit which is jointly occupied and used during any calendar year as a residence by 2 or more individuals the following shall apply:
- 21 "(A) The amount of the credit allowable 22 under subsection (a) by reason of expenditures 23 (as the case may be) made during such cal-24 endar year by any of such individuals with re-25 spect to such dwelling unit shall be determined

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by treating all of such individuals as 1 taxpayer
whose taxable year is such calendar year.

"(B) There shall be allowable with respect to such expenditures to each of such individuals, a credit under subsection (a) for the taxable year in which such calendar year ends in an amount which bears the same ratio to the amount determined under subparagraph (A) as the amount of such expenditures made by such individual during such calendar year bears to the aggregate of such expenditures made by all of such individuals during such calendar year.

"(2) Tenant-stockholder in cooperative Housing corporation.—In the case of an individual who is a tenant-stockholder (as defined in section 216) in a cooperative housing corporation (as defined in such section), such individual shall be treated as having made his tenant-stockholder's proportionate share (as defined in section 216(b)(3)) of any expenditures of such corporation.

"(3) Condominiums.—

"(A) IN GENERAL.—In the case of an individual who is a member of a condominium management association with respect to a condominium which such individual owns, such indi-

1	vidual shall be treated as having made his pro-
2	portionate share of any expenditures of such as-
3	sociation.
4	"(B) Condominium management asso-
5	CIATION.—For purposes of this paragraph, the
6	term 'condominium management association'
7	means an organization which meets the require-
8	ments of paragraph (1) of section 528(c) (other
9	than subparagraph (E) thereof) with respect to
10	a condominium project substantially all of the
11	units of which are used as residences.
12	"(4) Joint ownership of items of solar or
13	WIND ENERGY PROPERTY.—
13 14	WIND ENERGY PROPERTY.— "(A) IN GENERAL.—Any expenditure oth-
14	"(A) In general.—Any expenditure oth-
14 15	"(A) IN GENERAL.—Any expenditure otherwise qualifying as an expenditure described in
14 15 16	"(A) IN GENERAL.—Any expenditure otherwise qualifying as an expenditure described in paragraph (1), (2), or (4) of subsection (c) shall
14151617	"(A) IN GENERAL.—Any expenditure otherwise qualifying as an expenditure described in paragraph (1), (2), or (4) of subsection (c) shall not be treated as failing to so qualify merely be-
1415161718	"(A) In GENERAL.—Any expenditure otherwise qualifying as an expenditure described in paragraph (1), (2), or (4) of subsection (c) shall not be treated as failing to so qualify merely because such expenditure was made with respect
141516171819	"(A) IN GENERAL.—Any expenditure otherwise qualifying as an expenditure described in paragraph (1), (2), or (4) of subsection (c) shall not be treated as failing to so qualify merely because such expenditure was made with respect to 2 or more dwelling units.
14 15 16 17 18 19 20	"(A) In General.—Any expenditure otherwise qualifying as an expenditure described in paragraph (1), (2), or (4) of subsection (c) shall not be treated as failing to so qualify merely because such expenditure was made with respect to 2 or more dwelling units. "(B) Limits applied separately.—In
14 15 16 17 18 19 20 21	"(A) IN GENERAL.—Any expenditure otherwise qualifying as an expenditure described in paragraph (1), (2), or (4) of subsection (c) shall not be treated as failing to so qualify merely because such expenditure was made with respect to 2 or more dwelling units. "(B) LIMITS APPLIED SEPARATELY.—In the case of any expenditure described in sub-

1	to the amount of the expenditure made for each
2	dwelling unit.
3	"(5) Allocation in Certain Cases.—If less
4	than 80 percent of the use of an item is for nonbusi-
5	ness residential purposes, only that portion of the
6	expenditures for such item which is properly allo-
7	cable to use for nonbusiness residential purposes
8	shall be taken into account. For purposes of this
9	paragraph, use for a swimming pool shall be treated
10	as use which is not for residential purposes.
11	"(6) When expenditure made; amount of
12	EXPENDITURE.—
13	"(A) In general.—Except as provided in
14	subparagraph (B), an expenditure with respect
15	to an item shall be treated as made when the
16	original installation of the item is completed.
17	"(B) Expenditures part of building
18	CONSTRUCTION.—In the case of an expenditure
19	in connection with the construction or recon-
20	struction of a structure, such expenditure shall
21	be treated as made when the original use of the
22	constructed or reconstructed structure by the
23	taxpayer begins.
24	"(C) Amount.—The amount of any ex-
25	penditure shall be the cost thereof.

1	"(7) Reduction of credit for grants, tax-
2	EXEMPT BONDS, AND SUBSIDIZED ENERGY FINANC-
3	ING.—The rules of section 29(b)(3) shall apply for
4	purposes of this section.
5	"(e) Basis Adjustments.—For purposes of this
6	subtitle, if a credit is allowed under this section for any
7	expenditure with respect to any property, the increase in
8	the basis of such property which would (but for this sub-
9	section) result from such expenditure shall be reduced by
10	the amount of the credit so allowed.
11	"(f) TERMINATION.—The credit allowed under this
12	section shall not apply to taxable years beginning after
13	December 31, 2006.".
14	(b) Conforming Amendments.—
15	(1) Subsection (a) of section 1016 is amended
16	by striking "and" at the end of paragraph (29), by
17	striking the period at the end of paragraph (30) and
18	inserting "; and", and by adding at the end the fol-
19	lowing:
20	"(31) to the extent provided in section 25D(e),
21	in the case of amounts with respect to which a credit
22	has been allowed under section 25D.".
23	(2) The table of sections for subpart A of part
24	IV of subchapter A of chapter 1 is amended by in-

- 1 serting after the item relating to section 25B the fol-
- 2 lowing:
 - "Sec. 25D. Residential solar, wind, and fuel cell energy property.".
- 3 (c) Effective Date.—The amendments made by
- 4 this section shall apply to expenditures made after the
- 5 date of the enactment of this Act, in taxable years ending
- 6 after such date.
- 7 SEC. 514. CREDIT FOR PURCHASE OF ENERGY STAR PROD-
- 8 UCTS.
- 9 (a) In General.—Subpart A of part IV of sub-
- 10 chapter A of chapter 1 is amended by inserting after sec-
- 11 tion 25D the following new section:
- 12 "SEC. 25E. CREDIT FOR PURCHASE OF ENERGY STAR PROD-
- 13 ucts.
- 14 "(a) Allowance of Credit.—In the case of an in-
- 15 dividual, there shall be allowed as a credit against the tax
- 16 imposed by this chapter for the taxable year an amount
- 17 equal to 30 percent of the amount paid by the taxpayer
- 18 for the purchase of any Energy Star product during the
- 19 taxable year.
- 20 "(b) Limitation.—The amount allowable as a credit
- 21 under subsection (a) for a taxable year shall not exceed
- 22 \$1,000.

- 1 "(c) Energy Star Product.—For purposes of this
- 2 section, the term 'Energy Star product' means a product
- 3 which—
- 4 "(1) meets the guidelines, specifications, and
- 5 performance levels of the Energy Star program
- 6 jointly managed by the Environmental Protection
- 7 Agency and the Department of Energy, and
- 8 "(2) displays the Energy Star label.
- 9 "(d) Refundable Credit for Certain Tax-
- 10 Payers.—If the adjusted gross income of the taxpayer for
- 11 the taxable year is \$75,000 or less (\$150,000 or less in
- 12 the case of a joint return), the credit allowable under sub-
- 13 section (a) shall be treated as a credit allowed under sub-
- 14 part C.
- 15 "(e) Termination.—This section shall not apply to
- 16 taxable years beginning after December 31, 2006.".
- 17 (b) Clerical Amendment.—The table of sections
- 18 for subpart A of part IV of subchapter A of chapter 1
- 19 is amended by inserting after the item relating to section
- 20 25D the following new item:
 - "Sec. 25E. Credit for purchase of Energy Star products."
- (c) Effective Date.—The amendments made by
- 22 this section shall apply to taxable years beginning after
- 23 December 31, 2001.

Subtitle C—Electricity Facilities 1 and Production 2 3 SEC. 521. INCENTIVE FOR DISTRIBUTED GENERATION. (a) Depreciation of Distributed Power Prop-4 5 ERTY.— 6 (1) IN GENERAL.—Subparagraph (C) of section 7 168(e)(3) (relating to 7-year property) is amended 8 by redesignating clause (ii) as clause (iii) and by in-9 serting after clause (i) the following: "(ii) any distributed power property, 10 11 and". 12 (2) 10-YEAR CLASS LIFE.—The table contained 13 in section 168(g)(3)(B) is amended by inserting 14 after the item relating to subparagraph (C)(i) the 15 following: "(C)(ii) 10". 16 DISTRIBUTED POWER PROPERTY.—Section 168(i) is amended by adding at the end the following: 17 18 "(15) DISTRIBUTED POWER PROPERTY.—The 19 term 'distributed power property' means property— "(A) which is used in the generation of 20 21 electricity for primary use— 22 "(i) in nonresidential real or residen-23 tial rental property used in the taxpayer's 24 trade or business, or

1	"(ii) in the taxpayer's industrial man-
2	ufacturing process or plant activity, with a
3	rated total capacity in excess of 500 kilo-
4	watts,
5	"(B) which also may produce usable ther-
6	mal energy or mechanical power for use in a
7	heating or cooling application, as long as at
8	least 40 percent of the total useful energy pro-
9	duced consists of—
10	"(i) with respect to assets described in
11	subparagraph (A)(i), electrical power
12	(whether sold or used by the taxpayer), or
13	"(ii) with respect to assets described
14	in subparagraph (A)(ii), electrical power
15	(whether sold or used by the taxpayer) and
16	thermal or mechanical energy used in the
17	taxpayer's industrial manufacturing proc-
18	ess or plant activity,
19	"(C) which is not used to transport pri-
20	mary fuel to the generating facility or to dis-
21	tribute energy within or outside of the facility,
22	and
23	"(D) where it is reasonably expected that
24	not more than 50 percent of the produced elec-

1	tricity will be sold to, or used by, unrelated per-
2	sons.
3	For purposes of subparagraph (B), energy output is
4	determined on the basis of expected annual output
5	levels, measured in British thermal units (Btu),
6	using standard conversion factors established by the
7	Secretary.".
8	(c) Effective Date.—The amendments made by
9	this section shall apply to property placed in service after
10	the date of the enactment of this Act.
11	SEC. 522. MODIFICATIONS TO CREDIT FOR ELECTRICITY
12	PRODUCED FROM RENEWABLE AND WASTE
13	PRODUCTS.
	PRODUCTS. (a) Increase in Credit Rate.—
13	
13 14	(a) Increase in Credit Rate.—
13 14 15	(a) Increase in Credit Rate.—(1) In General.—Section 45(a)(1) is amended
13 14 15 16	 (a) Increase in Credit Rate.— (1) In General.—Section 45(a)(1) is amended by striking "1.5 cents" and inserting "1.8 cents".
13 14 15 16 17	 (a) Increase in Credit Rate.— (1) In General.—Section 45(a)(1) is amended by striking "1.5 cents" and inserting "1.8 cents". (2) Conforming amendments.—
13 14 15 16 17	 (a) Increase in Credit Rate.— (1) In General.—Section 45(a)(1) is amended by striking "1.5 cents" and inserting "1.8 cents". (2) Conforming amendments.— (A) Section 45(b)(2) is amended by strik-
13 14 15 16 17 18	 (a) Increase in Credit Rate.— (1) In General.—Section 45(a)(1) is amended by striking "1.5 cents" and inserting "1.8 cents". (2) Conforming amendments.— (A) Section 45(b)(2) is amended by striking "1.5 cent" and inserting "1.8 cent".
13 14 15 16 17 18 19 20	 (a) Increase in Credit Rate.— (1) In General.—Section 45(a)(1) is amended by striking "1.5 cents" and inserting "1.8 cents". (2) Conforming amendments.— (A) Section 45(b)(2) is amended by striking "1.5 cent" and inserting "1.8 cent". (B) Section 45(d)(2)(B) is amended by in-
13 14 15 16 17 18 19 20 21	 (a) Increase in Credit Rate.— (1) In General.—Section 45(a)(1) is amended by striking "1.5 cents" and inserting "1.8 cents". (2) Conforming amendments.— (A) Section 45(b)(2) is amended by striking "1.5 cent" and inserting "1.8 cent". (B) Section 45(d)(2)(B) is amended by inserting "(calendar year 2001 in the case of the

1	(1) In general.—Section 45(c)(1) (relating to
2	qualified energy resources) is amended by striking
3	"and" at the end of subparagraph (B), by striking
4	the period at the end of subparagraph (C) and in-
5	serting ", and", and by adding at the end the fol-
6	lowing:
7	"(D) alternative resources.".
8	(2) Definition of Alternative Re-
9	Sources.—Section 45(c) (relating to definitions) is
10	amended—
11	(A) by redesignating paragraph (3) as
12	paragraph (5),
13	(B) by redesignating paragraph (4) as
14	paragraph (3), and
15	(C) by inserting after paragraph (3), as re-
16	designated by subparagraph (B), the following:
17	"(4) Alternative Resources.—
18	"(A) IN GENERAL.—The term 'alternative
19	resources' means—
20	"(i) solar,
21	"(ii) biomass (other than closed loop
22	biomass),
23	"(iii) municipal solid waste,
24	"(iv) geothermal, and
25	"(v) landfill gas.

1	"(B) BIOMASS.—The term 'biomass'
2	means any solid, nonhazardous, cellulosic waste
3	material or any organic carbohydrate matter,
4	which is segregated from other waste materials,
5	and which is derived from—
6	"(i) any of the following forest-related
7	resources: mill residues, precommercial
8	thinnings, slash, and brush, but not includ-
9	ing old-growth timber,
10	"(ii) waste pallets, crates, dunnage,
11	untreated wood waste from construction or
12	manufacturing activities, landscape or
13	right-of-way tree trimmings, unsegregated
14	municipal solid waste, and post-consumer
15	wastepaper, or
16	"(iii) any of the following agriculture
17	sources: orchard tree crops, vineyard,
18	grain, legumes, sugar, and other crop by-
19	products or residues, including any pack-
20	aging and other materials which are
21	nontoxic and biodegradable and are associ-
22	ated with the processing, feeding, selling,
23	transporting, and disposal of such agricul-
24	tural materials.

1	"(C) MUNICIPAL SOLID WASTE.—The term
2	'municipal solid waste' has the same meaning
3	given the term 'solid waste' under section $2(27)$
4	of the Solid Waste Utilization Act (42 U.S.C.
5	6903).
6	"(D) Geothermal.—The term 'geo-
7	thermal' means energy derived from a geo-
8	thermal deposit (within the meaning of section
9	613(e)(2)), but only, in the case of electricity
10	generated by geothermal power, up to (but not
11	including) the electrical transmission stage.
12	"(E) LANDFILL GAS.—The term 'landfill
13	gas' means gas generated from the decomposi-
14	tion of any household solid waste, commercial
15	solid waste, and industrial solid waste disposed
16	of in a municipal solid waste landfill unit (as
17	such terms are defined in regulations promul-
18	gated under subtitle D of the Solid Waste Dis-
19	posal Act (42 U.S.C. 6941 et seq.).".
20	(3) QUALIFIED FACILITY.—Section 45(c)(5)
21	(defining qualified facility), as redesignated by para-
22	graph (2)(A), is amended by adding at the end the
23	following:
24	"(D) ALTERNATIVE RESOURCES FACIL-
25	ITY.—

1	"(i) In general.—Except as pro-
2	vided in clauses (ii) and (iii), in the case
3	of a facility using alternative resources to
4	produce electricity, the term 'qualified fa-
5	cility' means any facility of the taxpayer
6	which is originally placed in service after
7	the date of the enactment of this subpara-
8	graph.
9	"(ii) BIOMASS FACILITY.—In the case
10	of a facility using biomass described in
11	paragraph (4)(A)(ii) to produce electricity,
12	the term 'qualified facility' means any fa-
13	cility of the taxpayer.
14	"(iii) Geothermal Facility.—In
15	the case of a facility using geothermal to
16	produce electricity, the term 'qualified fa-
17	cility' means any facility of the taxpayer
18	which is originally placed in service after
19	December 31, 1992.
20	"(iv) Special rules.—In the case of
21	a qualified facility described in this sub-
22	paragraph, the 10-year period referred to
23	in subsection (a) shall be treated as begin-
24	ning no earlier than the date of the enact-

ment of this subparagraph.".

1	(4) GOVERNMENT-OWNED FACILITY.—Section
2	45(d)(6) (relating to credit eligibility in the case of
3	government-owned facilities using poultry waste) is
4	amended—
5	(A) by inserting "or alternative resources"
6	after "poultry waste", and
7	(B) by inserting "OR ALTERNATIVE RE-
8	SOURCES" after "POULTRY WASTE" in the
9	heading thereof.
10	(5) Qualified facilities with co-produc-
11	TION.—Section 45(b) (relating to limitations and ad-
12	justments) is amended by adding at the end the fol-
13	lowing:
14	"(4) Increased credit for co-production
15	FACILITIES.—
16	"(A) IN GENERAL.—In the case of a quali-
17	fied facility described in subsection $(c)(3)(D)(i)$
18	which has a co-production facility or a qualified
19	facility described in subparagraph (A), (B), or
20	(C) of subsection (c)(3) which adds a co-pro-
21	duction facility after the date of the enactment
22	of this paragraph, the amount in effect under
23	subsection (a)(1) for an eligible taxable year of
24	a taxpayer shall (after adjustment under para-

1	graph (2) and before adjustment under para-
2	graphs (1) and (3)) be increased by .25 cents.
3	"(B) CO-PRODUCTION FACILITY.—For
4	purposes of subparagraph (A), the term 'co-pro-
5	duction facility' means a facility which—
6	"(i) enables a qualified facility to
7	produce heat, mechanical power, chemicals,
8	liquid fuels, or minerals from qualified en-
9	ergy resources in addition to electricity,
10	and
11	"(ii) produces such energy on a con-
12	tinuous basis.
13	"(C) Eligible Taxable Year.—For pur-
14	poses of subparagraph (A), the term 'eligible
15	taxable year' means any taxable year in which
16	the amount of gross receipts attributable to the
17	co-production facility of a qualified facility are
18	at least 10 percent of the amount of gross re-
19	ceipts attributable to electricity produced by
20	such facility.".
21	(6) Qualified facilities located within
22	QUALIFIED INDIAN LANDS.—Section 45(b) (relating
23	to limitations and adjustments) is amended by add-
24	ing at the end the following:

1	"(5) Increased credit for qualified fa-
2	CILITY LOCATED WITHIN QUALIFIED INDIAN
3	LAND.—In the case of a qualified facility described
4	in subsection (c)(3)(D) which—
5	"(A) is located within—
6	"(i) qualified Indian lands (as defined
7	in section $7871(c)(3)$, or
8	"(ii) lands which are held in trust by
9	a Native Corporation (as defined in section
10	3(m) of the Alaska Native Claims Settle-
11	ment Act (43 U.S.C. 1602(m)) for Alaska
12	Natives, and
13	"(B) is operated with the explicit written
14	approval of the Indian tribal government or Na-
15	tive Corporation (as so defined) having jurisdic-
16	tion over such lands,
17	the amount in effect under subsection (a)(1) for a
18	taxable year shall (after adjustment under para-
19	graphs (2) and (4) and before adjustment under
20	paragraphs (1) and (3)) be increased by .25 cents.".
21	(7) Electricity produced from certain
22	RESOURCES CO-FIRED IN COAL PLANTS.—Section
23	45(d) (relating to definitions and special rules) is
24	amended by adding at the end the following:

1	"(8) Special rule for electricity pro-
2	DUCED FROM CERTAIN RESOURCES CO-FIRED IN
3	COAL PLANTS.—In the case of electricity produced
4	from biomass (including closed loop biomass), mu-
5	nicipal solid waste, or animal waste, co-fired in a fa-
6	cility which produces electricity from coal—
7	"(A) subsection (a)(1) shall be applied by
8	substituting '1 cent' for '1.8 cents',
9	"(B) such facility shall be considered a
10	qualified facility for purposes of this section,
11	and
12	"(C) the 10-year period referred to in sub-
13	section (a) shall be treated as beginning no ear-
14	lier than the date of the enactment of this para-
15	graph.".
16	(8) Conforming amendments.—
17	(A) The heading for section 45 is amended
18	by inserting "AND WASTE ENERGY" after
19	"RENEWABLE".
20	(B) The item relating to section 45 in the
21	table of sections subpart D of part IV of sub-
22	chapter A of chapter 1 is amended by inserting
23	"and waste energy" after "renewable".
24	(c) Additional Modifications of Renewable
25	AND WASTE ENERGY RESOURCE CREDIT —

1	(1) Credits for certain tax exempt orga-
2	NIZATIONS AND GOVERNMENTAL UNITS.—Section
3	45(d) (relating to definitions and special rules) is
4	amended by adding at the end the following:
5	"(9) Credits for certain tax exempt or-
6	GANIZATIONS AND GOVERNMENTAL UNITS.—
7	"(A) Allowance of credit.—Any credit
8	which would be allowable under subsection (a)
9	with respect to a qualified facility of an entity
10	if such entity were not exempt from tax under
11	this chapter shall be treated as a credit allow-
12	able under subpart C to such entity if such en-
13	tity is—
14	"(i) an organization described in sec-
15	tion $501(e)(12)(C)$ and exempt from tax
16	under section 501(a),
17	"(ii) an organization described in sec-
18	tion $1381(a)(2)(C)$, or
19	"(iii) an entity the income of which is
20	excludable from gross income under section
21	115.
22	"(B) Use of credit.—
23	"(i) Transfer of credit.—An enti-
24	ty described in subparagraph (A) may as-
25	sign, trade, sell, or otherwise transfer any

1	credit allowable to such entity under sub-
2	paragraph (A) to any taxpayer.
3	"(ii) Use of credit as an off-
4	SET.—Notwithstanding any other provision
5	of law, in the case of an entity described
6	in clause (i) or (ii) of subparagraph (A),
7	any credit allowable to such entity under
8	subparagraph (A) may be applied by such
9	entity, without penalty, as a prepayment of
10	any loan, debt, or other obligation the enti-
11	ty has incurred under subchapter I of
12	chapter 31 of title 7 of the Rural Elec-
13	trification Act of 1936 (7 U.S.C. 901 et
14	seq.).
15	"(C) Credit not income.—Neither a
16	transfer under clause (i) or a use under clause
17	(ii) of subparagraph (B) of any credit allowable
18	under subparagraph (A) shall result in income
19	for purposes of section 501(e)(12).
20	"(D) Transfer proceeds treated as
21	ARISING FROM ESSENTIAL GOVERNMENT FUNC-
22	TION.—Any proceeds derived by an entity de-
23	scribed in subparagraph (A)(iii) from the trans-
24	fer of any credit under subparagraph (B)(i)

1	shall be treated as arising from an essential
2	government function.
3	"(E) CREDITS NOT REDUCED BY TAX-EX-
4	EMPT BONDS OR CERTAIN OTHER SUBSIDIES.—
5	Subsection (b)(3) shall not apply to reduce any
6	credit allowable under subparagraph (A) with
7	respect to—
8	"(i) proceeds described in subpara-
9	graph (A)(ii) of such subsection, or
10	"(ii) any loan, debt, or other obliga-
11	tion incurred under subchapter I of chap-
12	ter 31 of title 7 of the Rural Electrification
13	Act of 1936 (7 U.S.C. 901 et seq.),
14	used to provide financing for any qualified facil-
15	ity.
16	"(F) TREATMENT OF UNRELATED PER-
17	sons.—For purposes of this paragraph, sales
18	among and between entities described in sub-
19	paragraph (A) shall be treated as sales between
20	unrelated parties.".
21	(2) Coordination with other credits.—
22	Section 45(d) is amended by adding at the end the
23	following:
24	"(10) Coordination with other credits.—
25	This section shall not apply to any qualified facility

1	with respect to which a credit under any other sec-
2	tion is allowed for the taxable year unless the tax-
3	payer elects to waive the application of such credit
4	to such facility.".
5	(3) Expansion to include animal waste.—
6	Section 45 (relating to electricity produced from cer-
7	tain renewable resources), is amended—
8	(A) by striking "poultry" each place it ap-
9	pears in subsection $(c)(1)(C)$ and subsection
10	(d)(6) and inserting "animal",
11	(B) by striking "POULTRY" in the heading
12	of paragraph (6) of subsection (d) and inserting
13	"ANIMAL",
14	(C) by striking paragraph (3) of subsection
15	(c) and inserting the following:
16	"(3) Animal waste.—The term 'animal waste'
17	means poultry manure and litter and other animal
18	wastes, including—
19	"(A) wood shavings, straw, rice hulls, and
20	other bedding material for the disposition of
21	manure, and
22	"(B) byproducts, packaging, and other ma-
23	terials which are nontoxic and biodegradable
24	and are associated with the processing, feeding,

1	selling, transporting, and disposal of such ani-
2	mal wastes.", and
3	(D) by striking subparagraph (C) of sub-
4	section (c)(5) and inserting the following:
5	"(C) Animal waste facility.—
6	"(i) In general.—Except as pro-
7	vided in clause (ii), in the case of a facility
8	using animal waste (other than poultry) to
9	produce electricity, the term 'qualified fa-
10	cility' means any facility of the taxpayer
11	which is originally placed in service after
12	the date of the enactment of this clause.
13	"(ii) Poultry waste.—In the case
14	of a facility using animal waste relating to
15	poultry to produce electricity, the term
16	'qualified facility' means any facility of the
17	taxpayer which is originally placed in serv-
18	ice after December 31, 1999.".
19	(4) Treatment of qualified facilities not
20	IN COMPLIANCE WITH POLLUTION LAWS.—Section
21	45(c)(5) (relating to qualified facilities) is amended
22	by adding at the end the following:
23	"(E) Noncompliance with pollution
24	LAWS.—For purposes of this paragraph, a facil-
25	ity which is not in compliance with the applica-

1 ble State and Federal pollution prevention, con-2 trol, and permit requirements for any period of 3 time shall not be considered to be a qualified

facility during such period.".

- (5) Permanent extension of qualified fa-6 CILITY DATES.—Section 45(c)(5) (relating to quali-7 fied facility), as redesignated by subsection (b)(2), is amended by striking ", and before January 1, 2002" 8 9 in subparagraphs (A) and (B).
- 10 (d) Effective Date.—The amendments made by 11 this section shall apply to electricity and other energy pro-12 duced after the date of the enactment of this Act.
- 13 SEC. 523. TREATMENT OF FACILITIES USING BAGASSE TO 14 PRODUCE ENERGY AS SOLID WASTE DIS-15 POSAL FACILITIES ELIGIBLE FOR TAX-EX-16
- 17 (a) In General.—Section 142 (relating to exempt facility bond) is amended by adding at the end the fol-18 19 lowing:

EMPT FINANCING.

- 20 "(k) SOLID WASTE DISPOSAL FACILITIES.—For pur-
- 21 poses of subsection (a)(6), the term 'solid waste disposal
- facilities' includes property located in Hawaii and used for
- 23 the collection, storage, treatment, utilization, processing,
- or final disposal of bagasse in the manufacture of eth-
- anol.". 25

1	(b) Effective Date.—The amendment made by
2	this section shall apply to bonds issued after the date of
3	the enactment of this Act.
4	SEC. 524. DEPRECIATION OF PROPERTY USED IN THE
5	TRANSMISSION OF ELECTRICITY.
6	(a) Depreciation of Property Used in the
7	Transmission of Electricity.—
8	(1) In general.—Subparagraph (C) of section
9	168(e)(3) (relating to 7-year property) is amended
10	by striking "and" at the end of clause (ii), by redes-
11	ignating clause (iii) as clause (iv), and by inserting
12	after clause (ii) the following:
13	"(iii) any property used in the trans-
14	mission of electricity, and".
15	(2) 10-YEAR CLASS LIFE.—The table contained
16	in section 168(g)(3)(B) is amended by inserting
17	after the item relating to subparagraph (C)(ii) the
18	following:
	"(C)(iii)
19	(b) Definition of Property Used in the Trans-
20	MISSION OF ELECTRICITY.—Section 168(i) is amended by
21	adding at the end the following:
22	"(16) Property used in the transmission
23	OF ELECTRICITY.—The term 'property used in the
24	transmission of electricity' means property used in
25	the transmission of electricity for sale.".

1	(c) Effective Date.—The amendments made by
2	this section shall apply to property placed in service after
3	the date of the enactment of this Act.
4	SEC. 525. CREDIT FOR INVESTMENT IN ADDITIONAL PLANT
5	CAPACITY FOR EXISTING RENEWABLE RE-
6	SOURCES FACILITIES PRODUCING ELEC-
7	TRICITY.
8	(a) In General.—Subpart E of part IV of sub-
9	chapter A of chapter 1 (relating to rules for computing
10	investment credit) is amended by inserting after section
11	48A the following:
12	"SEC. 48B. INCREASED OUTPUT OF EXISTING RENEWABLE
13	RESOURCES FACILITIES PRODUCING ELEC-
13	RESOURCES FACILITIES PRODUCING ELEC-
14	TRICITY.
14	TRICITY.
14 15	TRICITY. "(a) In General.—For purposes of section 46, the
14151617	TRICITY. "(a) In General.—For purposes of section 46, the renewable resources facilities increased output credit for
14151617	"(a) In General.—For purposes of section 46, the renewable resources facilities increased output credit for any taxable year is the 20 percent of the basis of qualified
14 15 16 17 18	"(a) In General.—For purposes of section 46, the renewable resources facilities increased output credit for any taxable year is the 20 percent of the basis of qualified property placed in service during such taxable year.
141516171819	"(a) In General.—For purposes of section 46, the renewable resources facilities increased output credit for any taxable year is the 20 percent of the basis of qualified property placed in service during such taxable year. "(b) Qualified Property.—For purposes of sub-
14 15 16 17 18 19 20	"(a) In General.—For purposes of section 46, the renewable resources facilities increased output credit for any taxable year is the 20 percent of the basis of qualified property placed in service during such taxable year. "(b) Qualified Property.—For purposes of subsection (a), the term 'qualified property' means property
14 15 16 17 18 19 20 21	"(a) In General.—For purposes of section 46, the renewable resources facilities increased output credit for any taxable year is the 20 percent of the basis of qualified property placed in service during such taxable year. "(b) Qualified Property.—For purposes of subsection (a), the term 'qualified property' means property originally placed in service after the date of the enactment
14 15 16 17 18 19 20 21 22	"(a) In General.—For purposes of section 46, the renewable resources facilities increased output credit for any taxable year is the 20 percent of the basis of qualified property placed in service during such taxable year. "(b) Qualified Property.—For purposes of subsection (a), the term 'qualified property' means property originally placed in service after the date of the enactment of this section as part of a qualified facility if—

- 1 "(2) after such property is placed in service, the
- 2 nameplate capacity rating of such facility for elec-
- 3 tricity production is not less than 110 percent of the
- 4 nameplate capacity rating of such facility as of the
- 5 date of the enactment of this section.
- 6 "(c) Qualified Facility.—For purposes of this
- 7 section, the term 'qualified facility' means a facility de-
- 8 scribed in section 45(c)(5).
- 9 "(d) Applicable Rules.—For purposes of this sec-
- 10 tion, rules similar to the rules of section 48A(e) shall
- 11 apply.
- 12 "(e) Termination.—No credit shall be allowed
- 13 under this section for property placed in service after De-
- 14 cember 31, 2004.".
- 15 (b) Credit Made Part of Investment Credit.—
- 16 Section 46 is amended by striking "and" at the end of
- 17 paragraph (2), by striking the period at the end of para-
- 18 graph (3) and inserting ", and", and by inserting after
- 19 paragraph (3) the following new paragraph:
- 20 "(4) the renewable resources facilities increased
- 21 output credit.".
- 22 (c) No Carryback Before Effective Date.—
- 23 Section 39(d) is amended by adding at the end the fol-
- 24 lowing:

1	"(12) No carryback of renewable re-
2	SOURCES FACILITIES INCREASED OUTPUT CREDIT
3	BEFORE EFFECTIVE DATE.—No portion of the un-
4	used business credit for any taxable year which is
5	attributable to the renewable resources facilities in-
6	creased output credit determined under section 48B
7	may be carried back to a taxable year ending before
8	January 1, 2002.".
9	(d) Clerical Amendment.—The table of sections
10	for subpart E of part IV of subchapter A of chapter 1
11	is amended by adding at the end the following new item:
	"Sec. 48. Increased output of existing renewable resources facilities producing electricity.—".
12	(e) Effective Date.—The amendments made by
13	this section shall apply to property placed in service after
14	December 31, 2001.
15	Subtitle D—Hybrid Electric
16	Vehicles
17	SEC. 531. ALTERNATIVE MOTOR VEHICLE CREDIT.
18	(a) In General.—Subpart B of part IV of sub-
19	chapter A of chapter 1 (relating to foreign tax credit, etc.)
20	is amended by adding at the end the following:
21	"SEC. 30B. ALTERNATIVE MOTOR VEHICLE CREDIT.
22	"(a) Allowance of Credit.—There shall be al-
23	lowed as a credit against the tax imposed by this chapter
24	for the taxable year an amount equal to the sum of—

1	"(1) the new qualified fuel cell motor vehicle
2	credit determined under subsection (b),
3	"(2) the new qualified hybrid motor vehicle
4	credit determined under subsection (c), and
5	"(3) the new qualified alternative fuel motor ve-
6	hicle credit determined under subsection (d).
7	"(b) New Qualified Fuel Cell Motor Vehicle
8	Credit.—
9	"(1) In general.—For purposes of subsection
10	(a), the new qualified fuel cell motor vehicle credit
11	determined under this subsection with respect to a
12	new qualified fuel cell motor vehicle placed in service
13	by the taxpayer during the taxable year is—
14	"(A) \$4,000, if such vehicle has a gross ve-
15	hicle weight rating of not more than 8,500
16	pounds,
17	"(B) \$10,000, if such vehicle has a gross
18	vehicle weight rating of more than 8,500
19	pounds but not more than 14,000 pounds,
20	"(C) \$20,000, if such vehicle has a gross
21	vehicle weight rating of more than 14,000
22	pounds but not more than 26,000 pounds, and
23	"(D) \$40,000, if such vehicle has a gross
24	vehicle weight rating of more than 26,000
25	pounds.

1	"(2) Increase for fuel efficiency.—
2	"(A) IN GENERAL.—The amount deter-
3	mined under paragraph (1)(A) with respect to
4	a new qualified fuel cell motor vehicle which is
5	a passenger automobile or light truck shall be
6	increased by—
7	"(i) \$1,000, if such vehicle achieves at
8	least 150 percent but less than 175 per-
9	cent of the 2000 model year city fuel econ-
10	omy,
11	"(ii) \$1,500, if such vehicle achieves
12	at least 175 percent but less than 200 per-
13	cent of the 2000 model year city fuel econ-
14	omy,
15	"(iii) \$2,000, if such vehicle achieves
16	at least 200 percent but less than 225 per-
17	cent of the 2000 model year city fuel econ-
18	omy,
19	"(iv) \$2,500, if such vehicle achieves
20	at least 225 percent but less than 250 per-
21	cent of the 2000 model year city fuel econ-
22	omy,
23	"(v) \$3,000, if such vehicle achieves
24	at least 250 percent but less than 275 per-

1	cent of the 2000 model year city fuel econ-
2	omy,
3	"(vi) \$3,500, if such vehicle achieves
4	at least 275 percent but less than 300 per-
5	cent of the 2000 model year city fuel econ-
6	omy, and
7	"(vii) \$4,000, if such vehicle achieves
8	at least 300 percent of the 2000 model
9	year city fuel economy.
10	"(B) 2000 model year city fuel econ-
11	OMY.—For purposes of subparagraph (A), the
12	2000 model year city fuel economy with respect
13	to a vehicle shall be determined in accordance
14	with the following tables:
15	"(i) In the case of a passenger auto-
16	mobile:
	"If vehicle class is: weight reconomy is: The 2000 model year city fuel economy is: 1,500 or 1,750 lbs 43.7 mpg 2,000 lbs 38.3 mpg 2,250 lbs 34.1 mpg 2,500 lbs 30.7 mpg 2,750 lbs 27.9 mpg 3,000 lbs 25.6 mpg 3,500 lbs 22.0 mpg 4,000 lbs 19.3 mpg 4,500 lbs 17.2 mpg 5,000 lbs 15.5 mpg 5,500 lbs 12.9 mpg 6,000 lbs 12.9 mpg 6,500 lbs 11.9 mpg
	7,000 or 8,500 lbs

	"If	vehicle	inertia	weight	The	2000	model	year	city	fuel
		class is:				econo				
		1,500 or 1,7								mpg
		2,000 lbs								mpg
		2,250 lbs								mpg
		2,500 lbs								mpg
		2,750 lbs 3,000 lbs								mpg mpg
		3,500 lbs								mpg
		4,000 lbs								mpg
		4,500 lbs								mpg
		5,000 lbs								mpg
		5,500 lbs								mpg
		6,000 lbs							13.6	mpg
		6,500 lbs								mpg
		7,000 or 8,5	00 lbs						12.0	mpg.
1				VEHICL						
2		Fo	r purp	oses of	subp	aragı	aph (B), 1	the t	erm
3		've	hicle i	nertia v	veigh	t cla	ss' h	as tl	ne s	ame
4		me	aning	as when	n def	ined	in reg	gulati	ons	pre-
5		ser	ribed by	y the A	dmin	istrat	or of	the	Envi	ron-
6		me	ntal P	rotection	Age	ency i	for pu	rpose	es of	the
7		adı	ministra	ation of	title	II of	the (Clean	Air	Act
8		(42)	2 U.S.C	C. 7521 e	et seq	[.).				
9		"(€	3) New	QUALIF	'IED 1	FUEL	CELL	мото	OR VI	ЕНІ-
10		CLE.—I	For pu	rposes o	of th	is su	bsecti	on, t	the t	erm
11		'new qu	alified	fuel cell	moto	or veh	icle' n	neans	a m	otor
12		vehicle-	_							
13			"(A)	which i	s pro	opelle	d by p	oowei	der	ived
14		fro	m one	or more	e cells	s whi	ch con	vert	chem	nical
15		ene	ergy dir	rectly int	to ele	ectrici	ty by	comb	ining	OX-
16		yge	en with	n hydrog	gen f	fuel v	which	is s	tored	on
17		boa	ard the	vehicle	in ar	ny for	m and	l may	or	may
18		not	t requir	e reform	ation	n prio	r to us	se,		

1	"(B) which, in the case of a passenger
2	automobile or light truck—
3	"(i) for 2002 and later model vehicles,
4	has received a certificate of conformity
5	under the Clean Air Act and meets or ex-
6	ceeds the equivalent qualifying California
7	low emission vehicle standard under sec-
8	tion 243(e)(2) of the Clean Air Act for
9	that make and model year, and
10	"(ii) for 2004 and later model vehi-
11	cles, has received a certificate that such ve-
12	hicle meets or exceeds the Bin 5 Tier II
13	emission level established in regulations
14	prescribed by the Administrator of the En-
15	vironmental Protection Agency under sec-
16	tion 202(i) of the Clean Air Act for that
17	make and model year vehicle,
18	"(C) the original use of which commences
19	with the taxpayer,
20	"(D) which is acquired for use or lease by
21	the taxpayer and not for resale, and
22	"(E) which is made by a manufacturer.
23	"(c) New Qualified Hybrid Motor Vehicle
24	Credit.—

1	"(1) In general.—For purposes of subsection
2	(a), the new qualified hybrid motor vehicle credit de-
3	termined under this subsection with respect to a new
4	qualified hybrid motor vehicle placed in service by
5	the taxpayer during the taxable year is the credit
6	amount determined under paragraph (2).
7	"(2) Credit amount.—
8	"(A) IN GENERAL.—The credit amount de-
9	termined under this paragraph shall be deter-
10	mined in accordance with the following tables:
11	"(i) In the case of a new qualified hy-
12	brid motor vehicle which is a passenger
13	automobile or light truck and which pro-
14	vides the following percentage of the max-
15	imum available power:
	"If percentage of the max- The credit amount is: imum available power is: At least 5 percent but less than 10 percent
16	"(ii) In the case of a new qualified hy-
17	brid motor vehicle which is a heavy duty
18	hybrid motor vehicle and which provides
19	the following percentage of the maximum
20	available nower:

1	"(I) If such vehicle has a gross
2	vehicle weight rating of not more than
3	14,000 pounds:
	"If percentage of the max- The credit amount is: imum available power is: At least 20 percent but less than 30 percent
4	"(II) If such vehicle has a gross
5	vehicle weight rating of more than
6	14,000 but not more than 26,000
7	pounds:
	"If percentage of the max- The credit amount is: imum available power is: At least 20 percent but less than 30 percent
8	"(III) If such vehicle has a gross
9	vehicle weight rating of more than
10	26,000 pounds:
	"If percentage of the max- The credit amount is: imum available power is: At least 20 percent but less than 30 percent \$6,000 At least 30 percent but less than 40 percent \$7,000 At least 40 percent but less than 50 percent \$8,000 At least 50 percent but less than 60 percent \$9,000 At least 60 percent \$10,000.
11	"(B) Increase for fuel efficiency.—
12	"(i) Amount.—The amount deter-
13	mined under subparagraph (A)(i) with re-
14	spect to a passenger automobile or light
15	truck shall be increased by—

1	"(I) \$500, if such vehicle
2	achieves at least 125 percent but less
3	than 150 percent of the 2000 model
4	year city fuel economy,
5	"(II) $\$1,000$, if such vehicle
6	achieves at least 150 percent but less
7	than 175 percent of the 2000 model
8	year city fuel economy,
9	"(III) \$1,500, if such vehicle
10	achieves at least 175 percent but less
11	than 200 percent of the 2000 model
12	year city fuel economy,
13	"(IV) \$2,000, if such vehicle
14	achieves at least 200 percent but less
15	than 225 percent of the 2000 model
16	year city fuel economy,
17	"(V) \$2,500, if such vehicle
18	achieves at least 225 percent but less
19	than 250 percent of the 2000 model
20	year city fuel economy, and
21	"(VI) \$3,000, if such vehicle
22	achieves at least 250 percent of the
23	2000 model year city fuel economy.
24	"(ii) 2000 model year city fuel
25	ECONOMY.—For purposes of clause (i), the

1	2000 model year city fuel economy with re-
2	spect to a vehicle shall be determined using
3	the tables provided in subsection (b)(2)(B)
4	with respect to such vehicle.
5	"(C) Increase for accelerated emis-
6	SIONS PERFORMANCE.—The amount deter-
7	mined under subparagraph (A)(ii) with respect
8	to an applicable heavy duty hybrid motor vehi-
9	cle shall be increased by the increase credit
10	amount determined in accordance with the fol-
11	lowing tables:
12	"(i) In the case of a vehicle which has
13	a gross vehicle weight rating of not more
14	than 14,000 pounds:
	"If the model year is: The increase credit amount is: 2002 \$3,500 2003 \$3,000 2004 \$2,500 2005 \$2,000 2006 \$1,500
15	"(ii) In the case of a vehicle which
16	has a gross vehicle weight rating of more
17	than 14,000 pounds but not more than
18	26,000 pounds:
	"If the model year is: The increase credit amount is: 2002 \$9,000 2003 \$7,750 2004 \$6,500 2005 \$5,250 2006 \$4,000

1 "(iii) In the case of a vehicle which 2 has a gross vehicle weight rating of more 3 than 26,000 pounds:

the model year is:	The increase credit amo	The increase credit amount is:	
2002		\$14,000	
2003		\$12,000	
2004		\$10,000	
2005		\$8,000	
2006		\$6,000.	

"(D) Definitions.—

"(i) APPLICABLE HEAVY DUTY HYBRID MOTOR VEHICLE.—For purposes of subparagraph (C), the term 'applicable heavy duty hybrid motor vehicle' means a heavy duty hybrid motor vehicle which is powered by an internal combustion or heat engine which is certified as meeting the emission standards set in the regulations prescribed by the Administrator of the Environmental Protection Agency for 2007 and later model year diesel heavy duty engines or 2008 and later model year ottocycle heavy duty engines, as applicable.

"(ii) HEAVY DUTY HYBRID MOTOR VE-HICLE.—For purposes of this paragraph, the term 'heavy duty hybrid motor vehicle' means a new qualified hybrid motor vehicle which has a gross vehicle weight rating of

"If

1	more than 10,000 pounds and draws pro-
2	pulsion energy from both of the following
3	onboard sources of stored energy:
4	"(I) An internal combustion or
5	heat engine using consumable fuel
6	which, for 2002 and later model vehi-
7	cles, has received a certificate of con-
8	formity under the Clean Air Act and
9	meets or exceeds a level of not greater
10	than 3.0 grams per brake horse-
11	power-hour of oxides of nitrogen and
12	0.01 per brake horsepower-hour of
13	particulate matter.
14	$``(\Pi)$ A rechargeable energy stor-
15	age system.
16	"(iii) Maximum available power.—
17	"(I) Passenger automobile
18	OR LIGHT TRUCK.—For purposes of
19	subparagraph (A)(i), the term 'max-
20	imum available power' means the
21	maximum power available from the
22	battery or other electrical storage de-
23	vice, during a standard 10 second
24	pulse power test, divided by the sum
25	of the battery or other electrical stor-

1	age device and the SAE net power of
2	the heat engine.
3	"(II) Heavy duty hybrid
4	MOTOR VEHICLE.—For purposes of
5	subparagraph (A)(ii), the term 'max-
6	imum available power' means the
7	maximum power available from the
8	battery or other electrical storage de-
9	vice, during a standard 10 second
10	pulse power test, divided by the vehi-
11	cle's total traction power. The term
12	'total traction power' means the sum
13	of the electric motor peak power and
14	the heat engine peak power of the ve-
15	hicle, except that if the electric motor
16	is the sole means by which the vehicle
17	can be driven, the total traction power
18	is the peak electric motor power.
19	"(3) New Qualified hybrid motor vehi-
20	CLE.—For purposes of this subsection, the term
21	'new qualified hybrid motor vehicle' means a motor
22	vehicle—
23	"(A) which draws propulsion energy from
24	onboard sources of stored energy which are
25	both—

1	"(i) an internal combustion or heat
2	engine using combustible fuel, and
3	"(ii) a rechargeable energy storage
4	system,
5	"(B) which, in the case of a passenger
6	automobile or light truck—
7	"(i) for 2002 and later model vehicles,
8	has received a certificate of conformity
9	under the Clean Air Act and meets or ex-
10	ceeds the equivalent qualifying California
11	low emission vehicle standard under sec-
12	tion 243(e)(2) of the Clean Air Act for
13	that make and model year, and
14	"(ii) for 2004 and later model vehi-
15	cles, has received a certificate that such ve-
16	hicle meets or exceeds the Bin 5 Tier II
17	emission level established in regulations
18	prescribed by the Administrator of the En-
19	vironmental Protection Agency under sec-
20	tion 202(i) of the Clean Air Act for that
21	make and model year vehicle,
22	"(C) the original use of which commences
23	with the taxpayer,
24	"(D) which is acquired for use or lease by
25	the taxpaver and not for resale, and

1	"(E) which is made by a manufacturer.
2	"(d) New Qualified Alternative Fuel Motor
3	Vehicle Credit.—
4	"(1) Allowance of credit.—Except as pro-
5	vided in paragraph (5), the credit determined under
6	this subsection is an amount equal to the applicable
7	percentage of the incremental cost of any new quali-
8	fied alternative fuel motor vehicle placed in service
9	by the taxpayer during the taxable year.
10	"(2) Applicable percentage.—For purposes
11	of paragraph (1), the applicable percentage with re-
12	spect to any new qualified alternative fuel motor ve-
13	hicle is—
14	"(A) 50 percent, plus
15	"(B) 30 percent, if such vehicle—
16	"(i) has received a certificate of con-
17	formity under the Clean Air Act and meets
18	or exceeds the most stringent standard
19	available for certification under the Clean
20	Air Act for that make and model year vehi-
21	cle (other than a zero emission standard),
22	or
23	"(ii) has received an order from an
24	applicable State certifying the vehicle for
25	sale or lease in California and meets or ex-

1	ceeds the most stringent standard available
2	for certification under the State laws of
3	California (enacted in accordance with a
4	waiver granted under section 209(b) of the
5	Clean Air Act) for that make and model
6	year vehicle (other than a zero emission
7	standard).
8	"(3) Incremental cost.—For purposes of
9	this subsection, the incremental cost of any new
10	qualified alternative fuel motor vehicle is equal to
11	the amount of the excess of the manufacturer's sug-
12	gested retail price for such vehicle over such price
13	for a gasoline or diesel fuel motor vehicle of the
14	same model, to the extent such amount does not
15	exceed—
16	"(A) \$5,000, if such vehicle has a gross ve-
17	hicle weight rating of not more than 8,500
18	pounds,
19	"(B) \$10,000, if such vehicle has a gross
20	vehicle weight rating of more than 8,500
21	pounds but not more than 14,000 pounds,
22	"(C) \$25,000, if such vehicle has a gross
23	vehicle weight rating of more than 14,000
24	pounds but not more than 26,000 pounds, and

1	"(D) \$40,000, if such vehicle has a gross
2	vehicle weight rating of more than 26,000
3	pounds.
4	"(4) Qualified alternative fuel motor
5	VEHICLE DEFINED.—For purposes of this
6	subsection—
7	"(A) IN GENERAL.—The term 'qualified
8	alternative fuel motor vehicle' means any motor
9	vehicle—
10	"(i) which is only capable of operating
11	on an alternative fuel,
12	"(ii) the original use of which com-
13	mences with the taxpayer,
14	"(iii) which is acquired by the tax-
15	payer for use or lease, but not for resale,
16	and
17	"(iv) which is made by a manufac-
18	turer.
19	"(B) ALTERNATIVE FUEL.—The term 'al-
20	ternative fuel' means compressed natural gas,
21	liquefied natural gas, liquefied petroleum gas,
22	hydrogen, and any liquid at least 85 percent of
23	the volume of which consists of methanol.
24	"(5) Credit for mixed-fuel vehicles.—

1	"(A) In GENERAL.—In the case of a
2	mixed-fuel vehicle placed in service by the tax-
3	payer during the taxable year, the credit deter-
4	mined under this subsection is an amount equal
5	to—
6	"(i) in the case of a 75/25 mixed-fuel
7	vehicle, 70 percent of the credit which
8	would have been allowed under this sub-
9	section if such vehicle was a qualified alter-
10	native fuel motor vehicle, and
11	"(ii) in the case of a 95/5 mixed-fuel
12	vehicle, 95 percent of the credit which
13	would have been allowed under this sub-
14	section if such vehicle was a qualified alter-
15	native fuel motor vehicle.
16	"(B) Mixed-fuel vehicle.—For pur-
17	poses of this subsection, the term 'mixed-fuel
18	vehicle' means any motor vehicle described in
19	subparagraph (C) or (D) of paragraph (3),
20	which—
21	"(i) is certified by the manufacturer
22	as being able to perform efficiently in nor-
23	mal operation on a combination of an al-
24	ternative fuel and a petroleum-based fuel,
25	"(ii) either—

1	"(I) has received a certificate of
2	conformity under the Clean Air Act,
3	or
4	"(II) has received an order from
5	an applicable State certifying the vehi-
6	cle for sale or lease in California and
7	meets or exceeds the low emission ve-
8	hicle standard under section 88.105-
9	94 of title 40, Code of Federal Regu-
10	lations, for that make and model year
11	vehicle,
12	"(iii) the original use of which com-
13	mences with the taxpayer,
14	"(iv) which is acquired by the tax-
15	payer for use or lease, but not for resale,
16	and
17	"(v) which is made by a manufac-
18	turer.
19	"(C) 75/25 MIXED-FUEL VEHICLE.—For
20	purposes of this subsection, the term '75/25
21	mixed-fuel vehicle' means a mixed-fuel vehicle
22	which operates using at least 75 percent alter-
23	native fuel and not more than 25 percent petro-
24	leum-based fuel.

1	"(D) 95/5 mixed-fuel vehicle.—For
2	purposes of this subsection, the term $95/5$
3	mixed-fuel vehicle' means a mixed-fuel vehicle
4	which operates using at least 95 percent alter-
5	native fuel and not more than 5 percent petro-
6	leum-based fuel.
7	"(e) Application With Other Credits.—The
8	credit allowed under subsection (a) for any taxable year
9	shall not exceed the excess (if any) of—
10	"(1) the regular tax for the taxable year re-
11	duced by the sum of the credits allowable under sub-
12	part A and sections 27, 29, and 30, over
13	"(2) the tentative minimum tax for the taxable
14	year.
15	"(f) Other Definitions and Special Rules.—
16	For purposes of this section—
17	"(1) Consumable fuel.—The term
18	'consumable fuel' means any solid, liquid, or gaseous
19	matter which releases energy when consumed by an
20	auxiliary power unit.
21	"(2) Motor vehicle.—The term 'motor vehi-
22	cle' has the meaning given such term by section
23	30(e)(2).
24	"(3) 2000 model year city fuel econ-
25	OMY.—The 2000 model year city fuel economy with

- respect to any vehicle shall be measured under rules similar to the rules under section 4064(c).
- "(4) OTHER TERMS.—The terms 'automobile', 'passenger automobile', 'light truck', and 'manufacturer' have the meanings given such terms in regulations prescribed by the Administrator of the Environmental Protection Agency for purposes of the administration of title II of the Clean Air Act (42) U.S.C. 7521 et seq.).
 - "(5) Vehicle must be assembled in united states.—No amount shall be allowed as a credit under subsection (a) with respect to any vehicle unless such vehicle is assembled in the United States by individuals employed under a collective bargaining agreement.
 - "(6) REDUCTION IN BASIS.—For purposes of this subtitle, the basis of any property for which a credit is allowable under subsection (a) shall be reduced by the amount of such credit so allowed (determined without regard to subsection (e)).
 - "(7) NO DOUBLE BENEFIT.—The amount of any deduction or credit allowable under this chapter—
- 24 "(A) for any incremental cost taken into 25 account in computing the amount of the credit

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determined under subsection (d) shall be reduced by the amount of such credit attributable to such cost, and

"(B) with respect to a vehicle described under subsection (b) or (c), shall be reduced by the amount of credit allowed under subsection (a) for such vehicle for the taxable year.

"(8) Property used by tax-exempt entity.—In the case of a credit amount which is allowable with respect to a motor vehicle which is acquired by an entity exempt from tax under this chapter, the person which sells or leases such vehicle to the entity shall be treated as the taxpayer with respect to the vehicle for purposes of this section and the credit shall be allowed to such person, but only if the person clearly discloses to the entity in any sale or lease document the specific amount of any credit otherwise allowable to the entity under this section and reduces the sale or lease price of such vehicle by an equivalent amount of such credit.

"(9) Recapture.—The Secretary shall, by regulations, provide for recapturing the benefit of any credit allowable under subsection (a) with respect to any property which ceases to be property eligible for such credit (including recapture in the case of a lease period of less than the economic life of a vehicle).

"(10) Property used outside united states, etc., not qualified.—No credit shall be allowed under subsection (a) with respect to any property referred to in section 50(b) or with respect to the portion of the cost of any property taken into account under section 179.

"(11) Election to not take credit.—No credit shall be allowed under subsection (a) for any vehicle if the taxpayer elects to not have this section apply to such vehicle.

"(12) Carryforward allowed.—

"(A) IN GENERAL.—If the credit amount allowable under subsection (a) for a taxable year exceeds the amount of the limitation under subsection (e) for such taxable year (referred to as the 'unused credit year' in this paragraph), such excess shall be allowed as a credit carryforward for each of the 20 taxable years following the unused credit year.

"(B) Rules.—Rules similar to the rules of section 39 shall apply with respect to the credit carryforward under subparagraph (A).

1	"(13) Interaction with air quality and
2	MOTOR VEHICLE SAFETY STANDARDS.—Unless oth-
3	erwise provided in this section, a motor vehicle shall
4	not be considered eligible for a credit under this sec-
5	tion unless such vehicle is in compliance with—
6	"(A) the applicable provisions of the Clean
7	Air Act for the applicable make and model year
8	of the vehicle (or applicable air quality provi-
9	sions of State law in the case of a State which
10	has adopted such provision under a waiver
11	under section 209(b) of the Clean Air Act), and
12	"(B) the motor vehicle safety provisions of
13	sections 30101 through 30169 of title 49,
14	United States Code.
15	"(g) Regulations.—
16	"(1) In General.—The Secretary shall pro-
17	mulgate such regulations as necessary to carry out
18	the provisions of this section.
19	"(2) Administrator of environmental
20	PROTECTION AGENCY.—The Administrator of the
21	Environmental Protection Agency, in coordination
22	with the Secretary of Transportation and the Sec-
23	retary of the Treasury, shall prescribe such regula-

tions as necessary to determine whether a motor ve-

1	hicle meets the requirements to be eligible for a
2	credit under this section.
3	"(h) TERMINATION.—This section shall not apply to
4	any property placed in service after—
5	"(1) in the case of a new qualified fuel cell
6	motor vehicle (as described in subsection (b)), De-
7	cember 31, 2011, and
8	"(2) in the case of any other property, Decem-
9	ber 31, 2007.".
10	(b) Conforming Amendments.—
11	(1) Section 1016(a) is amended by striking
12	"and" at the end of paragraph (31), by striking the
13	period at the end of paragraph (32) and inserting ",
14	and", and by adding at the end the following:
15	"(33) to the extent provided in section
16	30B(f)(4).".
17	(2) Section 53(d)(1)(B)(iii) is amended by in-
18	serting ", or not allowed under section 30B solely by
19	reason of the application of section $30B(e)(2)$ " be-
20	fore the period.
21	(3) Section $55(c)(2)$ is amended by inserting
22	"30B(e)," after "30(b)(3)".
23	(4) Section 6501(m) is amended by inserting
24	"30B(f)(9)," after "30(d)(4),".

1	(5) The table of sections for subpart B of part
2	IV of subchapter A of chapter 1 is amended by in-
3	serting after the item relating to section 30A the fol-
4	lowing:
	"Sec. 30B. Alternative motor vehicle credit.".
5	(e) Effective Date.—The amendments made by
6	this section shall apply to property placed in service after
7	December 31, 2001, in taxable years ending after such
8	date.
9	SEC. 532. MODIFICATION OF CREDIT FOR QUALIFIED ELEC-
10	TRIC VEHICLES.
11	(a) Amount of Credit.—
12	(1) In general.—Section 30(a) (relating to al-
13	lowance of credit) is amended by striking "10 per-
14	cent of".
15	(2) Limitation of credit according to
16	Type of vehicle.—Section 30(b) (relating to limi-
17	tations) is amended—
18	(A) by striking paragraphs (1) and (2) and
19	inserting the following:
20	"(1) Limitation according to type of ve-
21	HICLE.—The amount of the credit allowed under
22	subsection (a) for any vehicle shall not exceed the
23	greatest of the following amounts applicable to such
24	vehicle:

1	"(A) In the case of a vehicle which con-
2	forms to the Motor Vehicle Safety Standard
3	500 prescribed by the Secretary of Transpor-
4	tation, the lesser of—
5	"(i) 10 percent of the manufacturer's
6	suggested retail price of the vehicle, or
7	"(ii) \$4,000.
8	"(B) In the case of a vehicle with a gross
9	vehicle weight rating not exceeding 8,500
10	pounds—
11	"(i) \$4,000, or
12	"(ii) \$6,000, if such vehicle is—
13	"(I) capable of a driving range of
14	at least 100 miles on a single charge
15	of the vehicle's rechargeable batteries
16	and measured pursuant to the urban
17	dynamometer schedules under appen-
18	dix I to part 86 of title 40, Code of
19	Federal Regulations, or
20	"(II) capable of a payload capac-
21	ity of at least 1000 pounds.
22	"(C) In the case of a vehicle with a gross
23	vehicle weight rating exceeding 8,500 but not
24	exceeding 14,000 pounds, \$10,000.

1	"(D) In the case of a vehicle with a gross
2	vehicle weight rating exceeding 14,000 but not
3	exceeding 26,000 pounds, \$20,000.
4	"(E) In the case of a vehicle with a gross
5	vehicle weight rating exceeding 26,000 pounds,
6	\$40,000.", and
7	(B) by redesignating paragraph (3) as
8	paragraph (2).
9	(3) Conforming amendments.—
10	(A) Section 53(d)(1)(B)(iii) is amended by
11	striking "section 30(b)(3)(B)" and inserting
12	"section 30(b)(2)(B)".
13	(B) Section 55(c)(2) is amended by strik-
14	ing " $30(b)(3)$ " and inserting " $30(b)(2)$ ".
15	(b) QUALIFIED BATTERY ELECTRIC VEHICLE.—
16	(1) In general.—Section 30(c)(1)(A) (defin-
17	ing qualified electric vehicle) is amended to read as
18	follows:
19	"(A) which is—
20	"(i) operated solely by use of a bat-
21	tery or battery pack, or
22	"(ii) powered primarily through the
23	use of an electric battery or battery pack
24	using a flywheel or capacitor which stores
25	energy produced by an electric motor

1	through regenerative braking to assist in
2	vehicle operation,".
3	(2) Leased vehicles.—Section 30(c)(1)(C) is
4	amended by inserting "or lease" after "use".
5	(3) Conforming amendments.—
6	(A) Subsections (a), (b)(2), and (c) of sec-
7	tion 30 are each amended by inserting "bat-
8	tery" after "qualified" each place it appears.
9	(B) The heading of subsection (c) of sec-
10	tion 30 is amended by inserting "Battery"
11	after "Qualified".
12	(C) The heading of section 30 is amended
13	by inserting "BATTERY" after "QUALIFIED".
14	(D) The item relating to section 30 in the
15	table of sections for subpart B of part IV of
16	subchapter A of chapter 1 is amended by in-
17	serting "battery" after "qualified".
18	(E) Section $179A(c)(3)$ is amended by in-
19	serting "battery" before "electric".
20	(F) The heading of paragraph (3) of sec-
21	tion 179A(c) is amended by inserting "BAT-
22	TERY" before "ELECTRIC".
23	(c) Additional Special Rules.—Section 30(d)
24	(relating to special rules) is amended by adding at the end
25	the following:

- 1 "(5) NO DOUBLE BENEFIT.—The amount of 2 any deduction or credit allowable under this chapter 3 for any cost taken into account in computing the 4 amount of the credit determined under subsection 5 (a) shall be reduced by the amount of such credit at-6 tributable to such cost.
 - "(6) Property used by tax-exempt entities.—In the case of a credit amount which is allowable with respect to a vehicle which is acquired
 by an entity exempt from tax under this chapter, the
 person which sells or leases such vehicle to the entity
 shall be treated as the taxpayer with respect to the
 vehicle for purposes of this section and the credit
 shall be allowed to such person, but only if the person clearly discloses to the entity in any sale or lease
 contract the specific amount of any credit otherwise
 allowable to the entity under this section and reduces the sale or lease price of such vehicle by an
 equivalent amount of such credit.".
- 20 (d) Extension.—Section 30(e) (relating to termi-21 nation) is amended by striking "2004" and inserting 22 "2007".
- 23 (e) Effective Date.—The amendments made by 24 this section shall apply to property placed in service after

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1	December 31, 2001, in taxable years ending after such
2	date.
3	SEC. 533. CREDIT FOR RETAIL SALE OF ALTERNATIVE
4	FUELS AS MOTOR VEHICLE FUEL.
5	(a) In General.—Subpart D of part IV of sub-
6	chapter A of chapter 1 (relating to business related cred-
7	its) is amended by inserting after section 40 the following:
8	"SEC. 40A. CREDIT FOR RETAIL SALE OF ALTERNATIVE
9	FUELS AS MOTOR VEHICLE FUEL.
10	"(a) General Rule.—For purposes of section 38,
11	the alternative fuel retail sales credit for any taxable year
12	is 25 cents for each gasoline gallon equivalent of alter-
13	native fuel sold at retail by the taxpayer during such year
14	as a fuel to propel any qualified motor vehicle, but only
15	if the taxpayer reduces the retail sales price of such fuel
16	by an equivalent amount of such credit.
17	"(b) Definitions.—For purposes of this section—
18	"(1) Alternative fuel.—The term 'alter-
19	native fuel' means compressed natural gas, liquefied
20	natural gas, liquefied petroleum gas, hydrogen, and
21	any liquid at least 85 percent of the volume of which
22	consists of methanol.
23	"(2) Gasoline Gallon equivalent.—The
24	term 'gasoline gallon equivalent' means, with respect
25	to any alternative fuel, the amount (determined by

the Secretary) of such fuel having a Btu content of 114,000.

"(3) QUALIFIED MOTOR VEHICLE.—The term 'qualified motor vehicle' means any motor vehicle (as defined in section 30(c)(2)) which meets any applicable Federal or State emissions standards with respect to each fuel by which such vehicle is designed to be propelled.

"(4) SOLD AT RETAIL.—

"(A) IN GENERAL.—The term 'sold at retail' means the sale, for a purpose other than resale, after manufacture, production, or importation.

"(B) USE TREATED AS SALE.—If any person uses alternative fuel (including any use after importation) as a fuel to propel any qualified alternative fuel motor vehicle (as defined in section 30B(d)(4)) before such fuel is sold at retail, then such use shall be treated in the same manner as if such fuel were sold at retail as a fuel to propel such a vehicle by such person.

"(c) No Double Benefit.—The amount of any deduction or credit allowable under this chapter for any fuel taken into account in computing the amount of the credit

- 1 determined under subsection (a) shall be reduced by the
- 2 amount of such credit attributable to such fuel.
- 3 "(d) Pass-Thru in the Case of Estates and
- 4 Trusts.—Under regulations prescribed by the Secretary,
- 5 rules similar to the rules of subsection (d) of section 52
- 6 shall apply.
- 7 "(e) TERMINATION.—This section shall not apply to
- 8 any fuel sold at retail after December 31, 2006.".
- 9 (b) Credit Treated as Business Credit.—Sec-
- 10 tion 38(b) (relating to current year business credit) is
- 11 amended by striking "plus" at the end of paragraph (16),
- 12 by striking the period at the end of paragraph (17) and
- 13 inserting ", plus", and by adding at the end the following:
- 14 "(18) the alternative fuel retail sales credit de-
- termined under section 40A(a).".
- 16 (c) Transitional Rule.—Section 39(d) (relating to
- 17 transitional rules) is amended by adding at the end the
- 18 following:
- 19 "(14) NO CARRYBACK OF SECTION 40A CREDIT
- 20 BEFORE EFFECTIVE DATE.—No portion of the un-
- 21 used business credit for any taxable year which is
- 22 attributable to the alternative fuel retail sales credit
- determined under section 40A(a) may be carried
- back to a taxable year ending before January 1,
- 25 2002.".

- 1 (d) CLERICAL AMENDMENT.—The table of sections
- 2 for subpart D of part IV of subchapter A of chapter 1
- 3 is amended by inserting after the item relating to section
- 4 40 the following:

"Sec. 40A. Credit for retail sale of alternative fuels as motor vehicle fuel.".

- 5 (e) Effective Date.—The amendments made by
- 6 this section shall apply to fuel sold at retail after Decem-
- 7 ber 31, 2001, in taxable years ending after such date.
- 8 SEC. 534. EXTENSION OF DEDUCTION FOR CERTAIN RE-
- 9 **FUELING PROPERTY.**
- 10 (a) IN GENERAL.—Section 179A(f) (relating to ter-
- 11 mination) is amended by striking "2004" and inserting
- 12 "2007".
- 13 (b) Conforming Amendment.—Section 179A(c)
- 14 (relating to qualified clean-fuel vehicle property defined)
- 15 is amended by striking paragraph (3).
- 16 (c) Effective Date.—The amendments made by
- 17 this section shall apply to property placed in service after
- 18 December 31, 2001, in taxable years ending after such
- 19 date.
- 20 SEC. 535. CREDIT FOR INSTALLATION OF ALTERNATIVE
- 21 FUELING STATIONS.
- 22 (a) In General.—Subpart B of part IV of sub-
- 23 chapter A of chapter 1 (relating to foreign tax credit, etc.)
- 24 is amended by adding at the end the following:

1	"SEC. 30C. CLEAN-FUEL VEHICLE REFUELING PROPERTY
2	CREDIT.
3	"(a) Credit Allowed.—There shall be allowed as
4	a credit against the tax imposed by this chapter for the
5	taxable year an amount equal to—
6	"(1) 50 percent, in the case of retail clean-fuel
7	vehicle refueling property, and
8	"(2) 50 percent, in the case of residential clean-
9	fuel vehicle refueling property,
10	of the amount paid or incurred by the taxpayer during
11	the taxable year for the installation of clean-fuel vehicle
12	refueling property.
13	"(b) Limitation.—The credit allowed under—
14	((1) subsection $(a)(1)$ with respect to clean-fuel
15	vehicle refueling property, shall not exceed \$30,000,
16	and
17	"(2) subsection (a)(2) with respect to clean-fuel
18	vehicle refueling property, shall not exceed \$1,000.
19	"(c) Year Credit Allowed.—The credit allowed
20	under subsection (a) shall be allowed in the taxable year
21	in which the clean-fuel vehicle refueling property is placed
22	in service by the taxpayer.
23	"(d) Definitions.—For purposes of this section—
24	"(1) CLEAN-FUEL VEHICLE REFUELING PROP-
25	ERTY.—The term 'clean-fuel vehicle refueling prop-
26	erty' has the same meaning given the term 'qualified

1	clean-fuel vehicle refueling property' under section
2	179A.
3	"(2) Residential clean-fuel vehicle re-
4	FUELING PROPERTY.—The term 'residential clean-
5	fuel vehicle refueling property' means clean-fuel ve-
6	hicle refueling property which is installed on prop-
7	erty which is used as the principal residence (within
8	the meaning of section 121) of the taxpayer.
9	"(3) Retail clean-fuel vehicle refueling
10	PROPERTY.—The term 'retail clean-fuel vehicle re-
11	fueling property' means clean-fuel vehicle refueling
12	property—
13	"(A) which is installed on property used in
14	a trade or business of the taxpayer, and
15	"(B) if such refueling property—
16	"(i) is—
17	"(I) available to the public dur-
18	ing normal business hours, and
19	"(II) capable of serving at least 3
20	motor vehicles at the same time, or
21	"(ii) regularly serves at least 1 fleet of
22	10 or more motor vehicles.
23	"(e) Application With Other Credits.—The
24	credit allowed under subsection (a) for any taxable year
25	shall not exceed the excess (if any) of—

- 1 "(1) the regular tax for the taxable year re-
- 2 duced by the sum of the credits allowable under sub-
- 3 part A and sections 27, 29, 30, and 30B, over
- 4 "(2) the tentative minimum tax for the taxable
- 5 year.
- 6 "(f) Basis Reduction.—For purposes of this title,
- 7 the basis of any property shall be reduced by the portion
- 8 of the cost of such property taken into account under sub-
- 9 section (a).
- 10 "(g) No Double Benefit.—No deduction shall be
- 11 allowed under section 179A with respect to any property
- 12 with respect to which a credit is allowed under subsection
- 13 (a).
- 14 "(h) Refueling Property Installed for Tax-
- 15 Exempt Entities.—In the case of clean-fuel vehicle re-
- 16 fueling property installed on property owned or used by
- 17 an entity exempt from tax under this chapter, the person
- 18 which installs such refueling property for the entity shall
- 19 be treated as the taxpayer with respect to the refueling
- 20 property for purposes of this section (and such refueling
- 21 property shall be treated as retail clean-fuel vehicle refuel-
- 22 ing property) and the credit shall be allowed to such per-
- 23 son, but only if the person clearly discloses to the entity
- 24 in any installation contract the specific amount of the
- 25 credit allowable under this section and modifies the price

1	of such contract to take into account the amount of such
2	credit.
3	"(i) Carryforward Allowed.—
4	"(1) In general.—If the credit amount allow-
5	able under subsection (a) for a taxable year exceeds
6	the amount of the limitation under subsection (b)
7	for such taxable year (referred to as the 'unused
8	credit year' in this subsection), such excess shall be
9	allowed as a credit carryforward for each of the 20
10	taxable years following the unused credit year.
11	"(2) Rules similar to the rules of sec-
12	tion 39 shall apply with respect to the credit
13	carryforward under paragraph (1).
14	"(j) Special Rules.—Rules similar to the rules of
15	paragraphs (4) and (5) of section 179A(e) shall apply.
16	"(k) Regulations.—The Secretary shall prescribe
17	such regulations as necessary to carry out the provisions
18	of this section.
19	"(l) Termination.—This section shall not apply to
20	any property placed in service after December 31, 2006.".
21	(b) Conforming Amendments.—
22	(1) Section 1016(a) is amended by striking
23	"and" at the end of paragraph (32), by striking the
24	period at the end of paragraph (33) and inserting ",
25	and", and by adding at the end the following:

1	"(34) to the extent provided in section
2	30C(f).".
3	(2) Section 53(d)(1)(B)(iii) is amended by in-
4	serting ", or not allowed under section 30C solely by
5	reason of the application of section 30C(e)(2)" be-
6	fore the period.
7	(3) Section 55(c)(2) is amended by inserting
8	"30C(e)," after "30B(e)".
9	(4) The table of sections for subpart B of part
10	IV of subchapter A of chapter 1 is amended by in-
11	serting after the item relating to section 30B the fol-
12	lowing:
	"Sec. 30C. Clean-fuel vehicle refueling property credit.".
13	(c) Effective Date.—The amendments made by
14	this section shall apply to property placed in service after

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15 December 31, 2001, in taxable years ending after such

16 date.